

FIG. 1
(PRIOR ART)

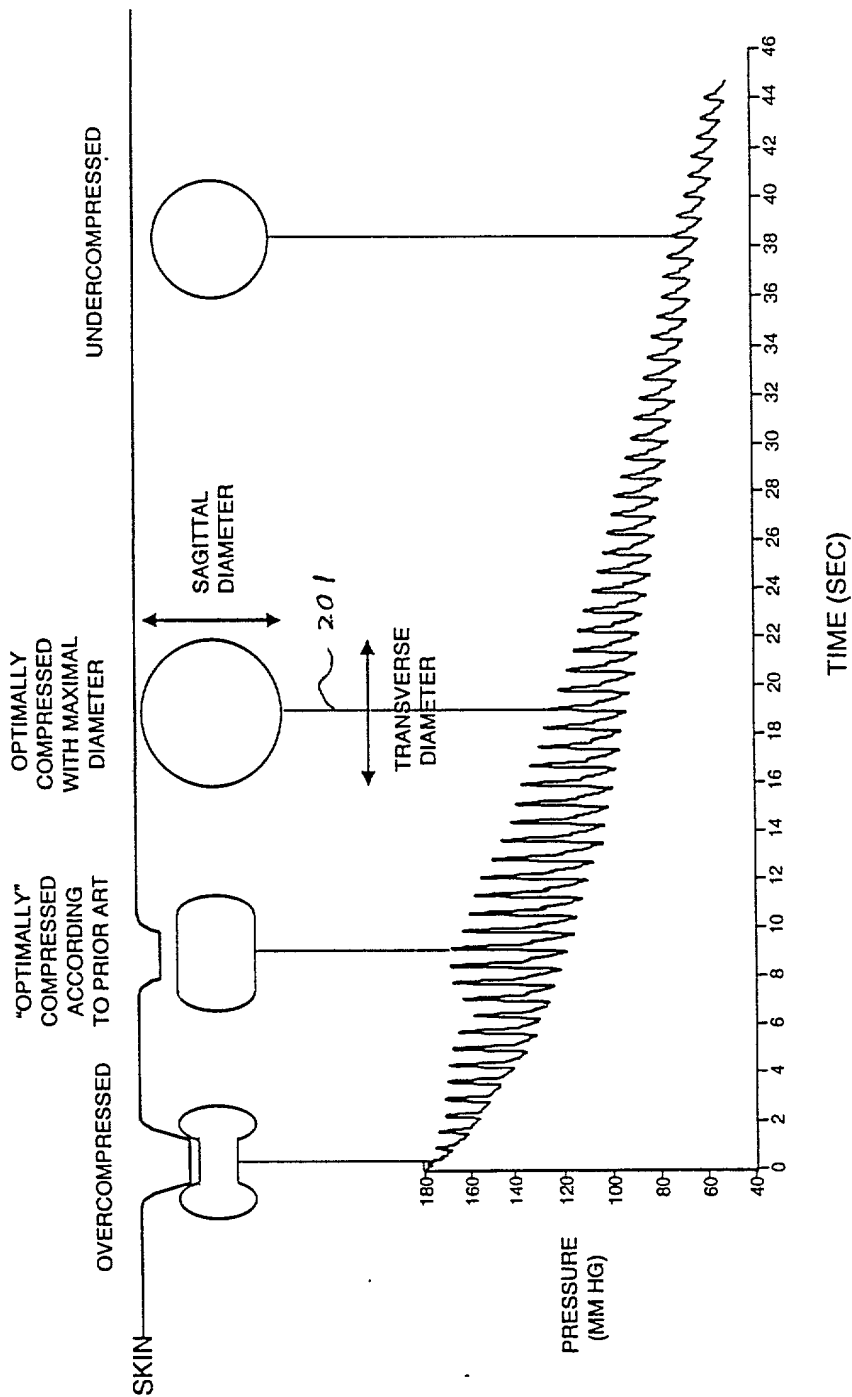


Fig. 2

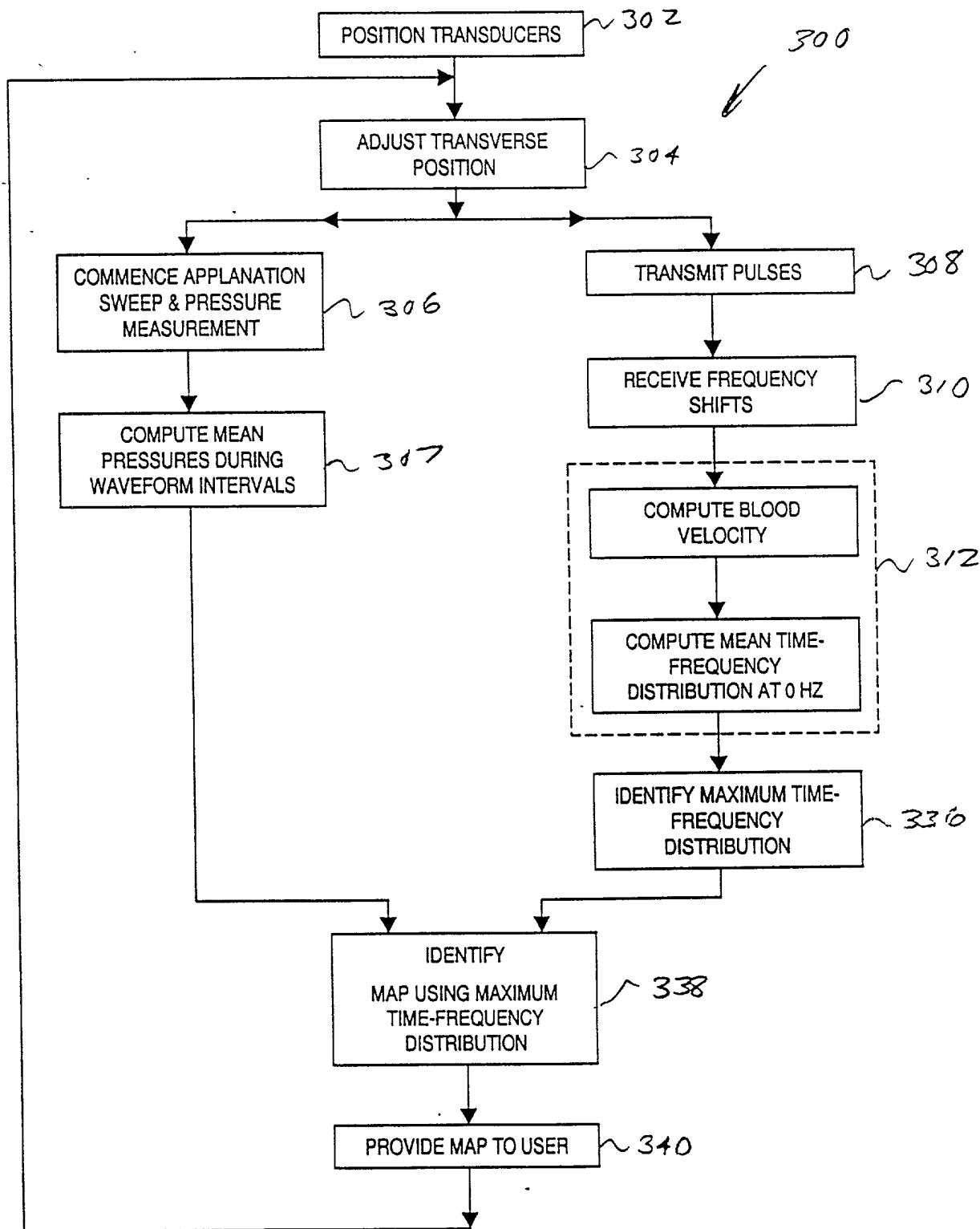


FIG. 3A

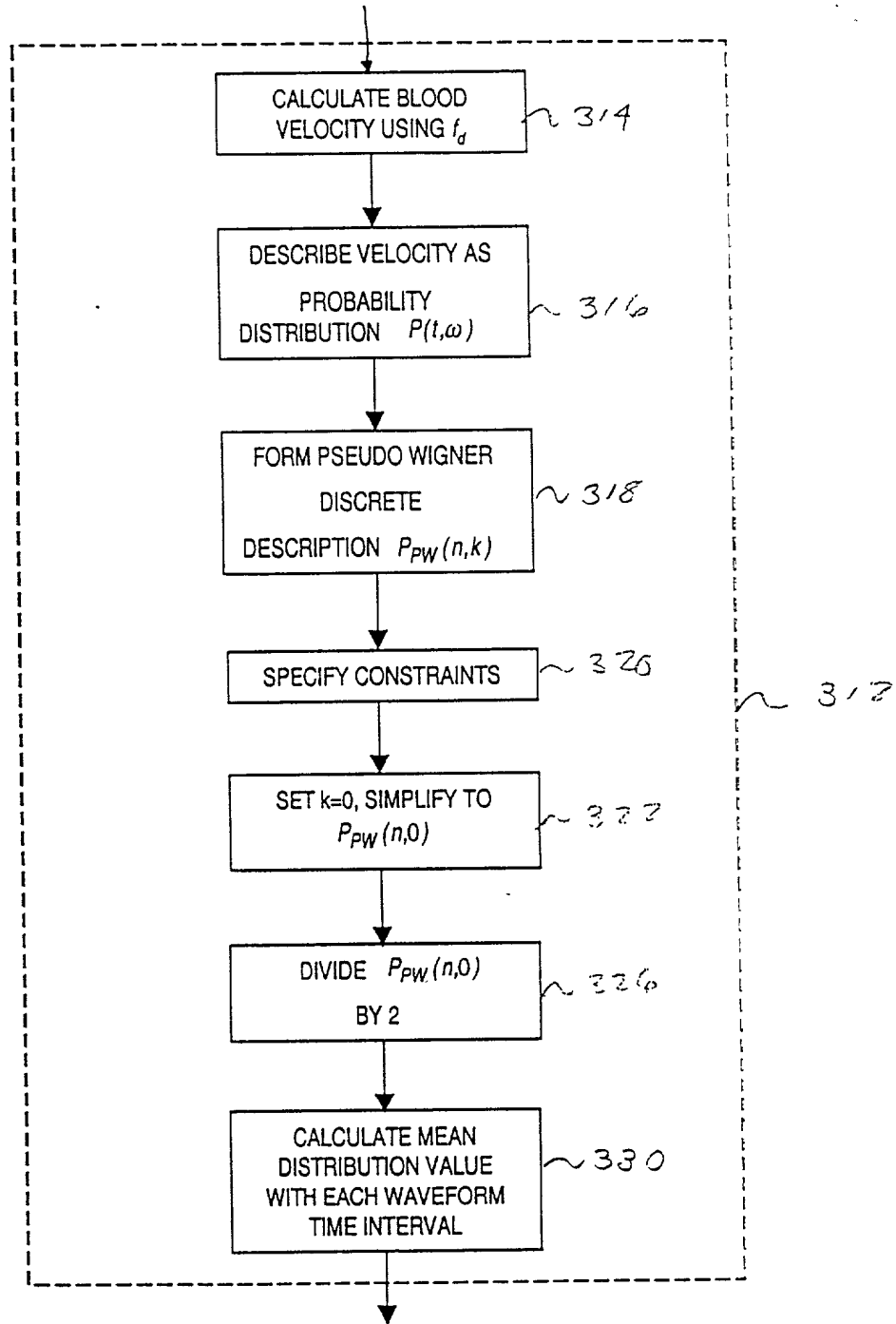


FIG. 36

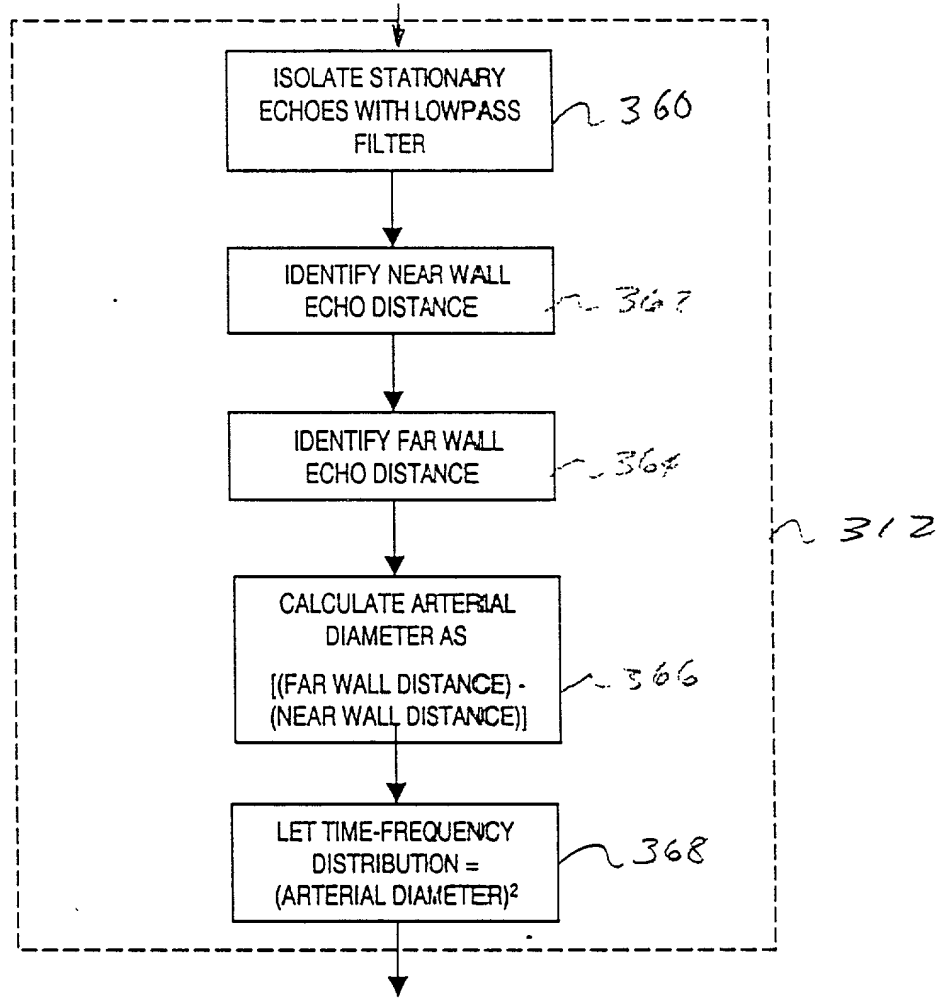


FIG. 3C

FIG. 4a

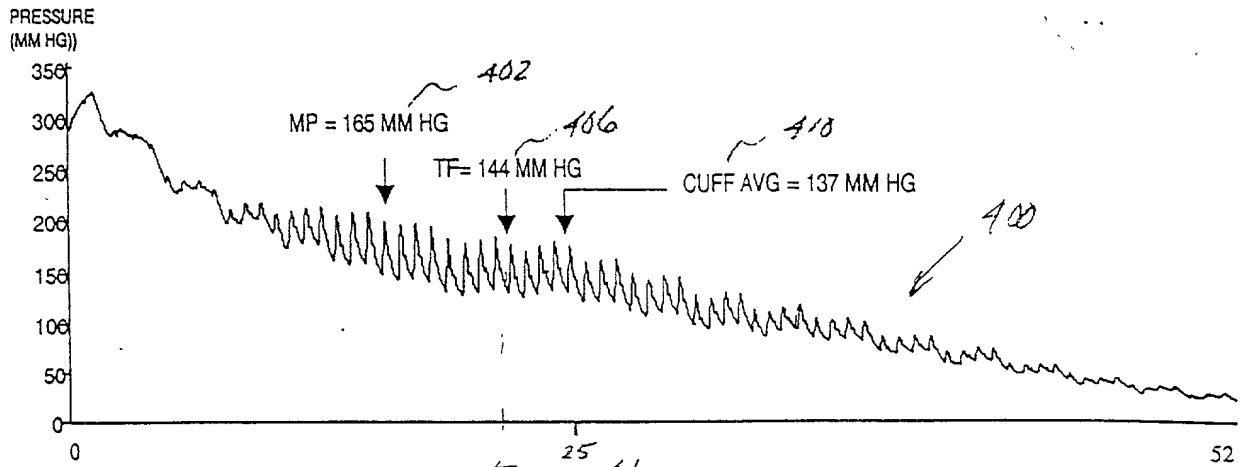


FIG. 4b

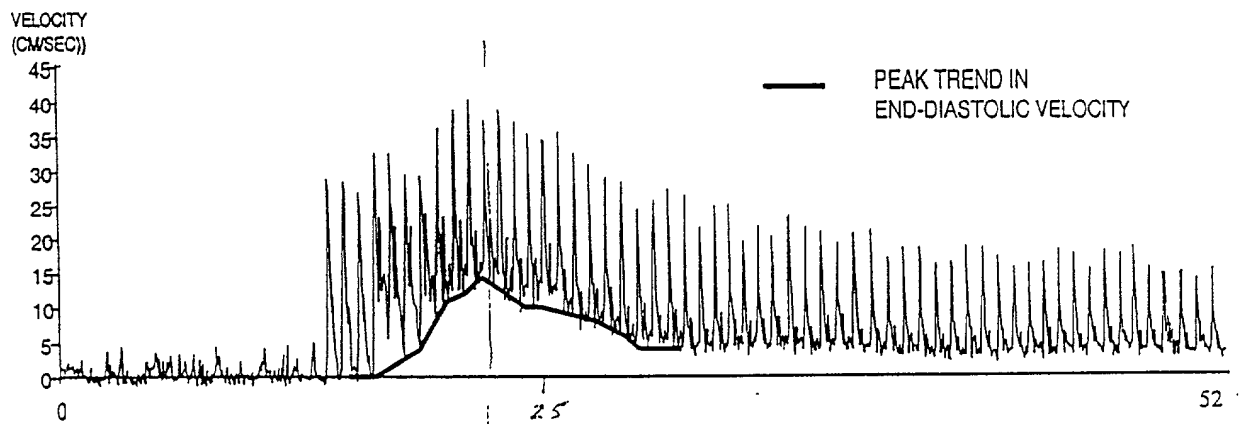
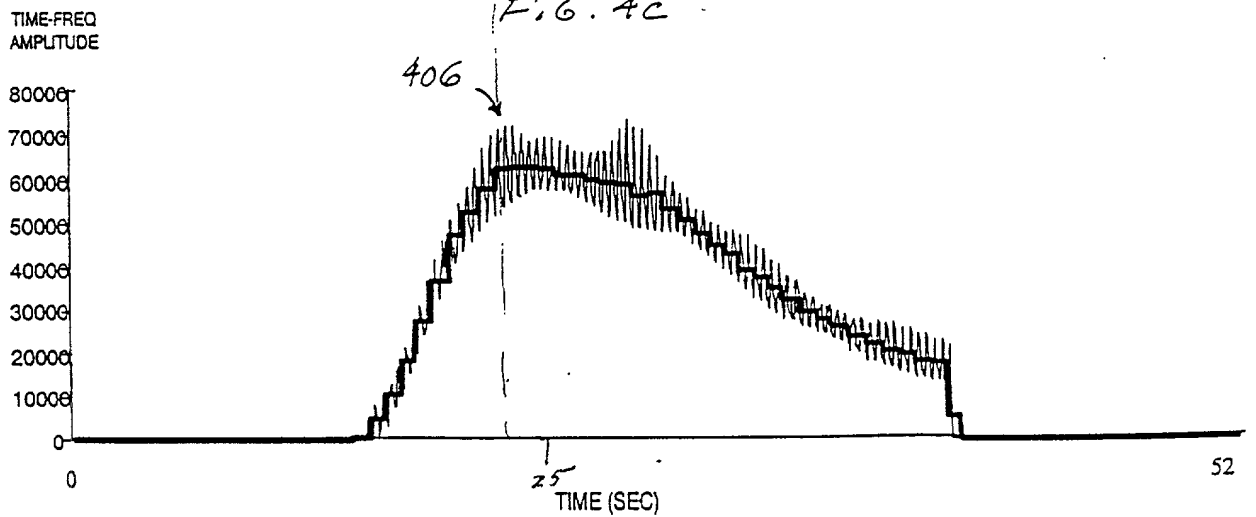
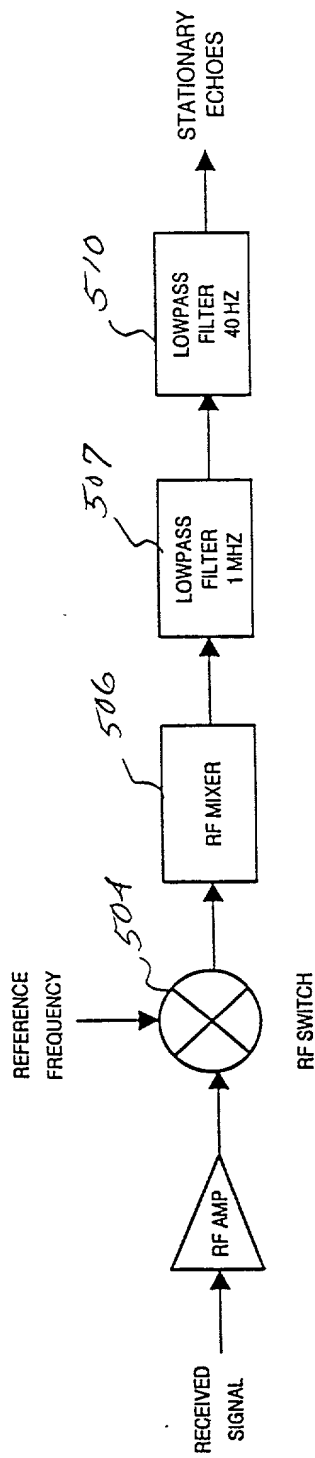
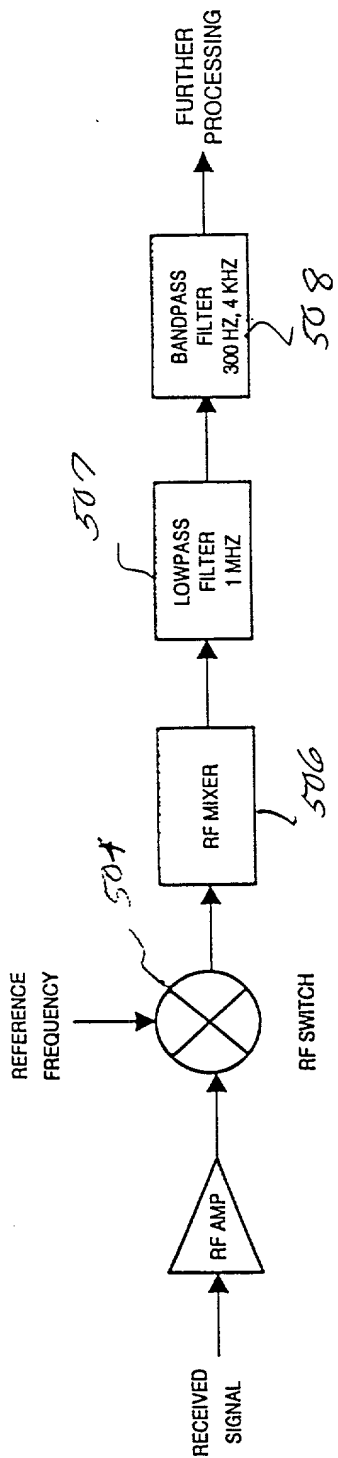


FIG. 4c





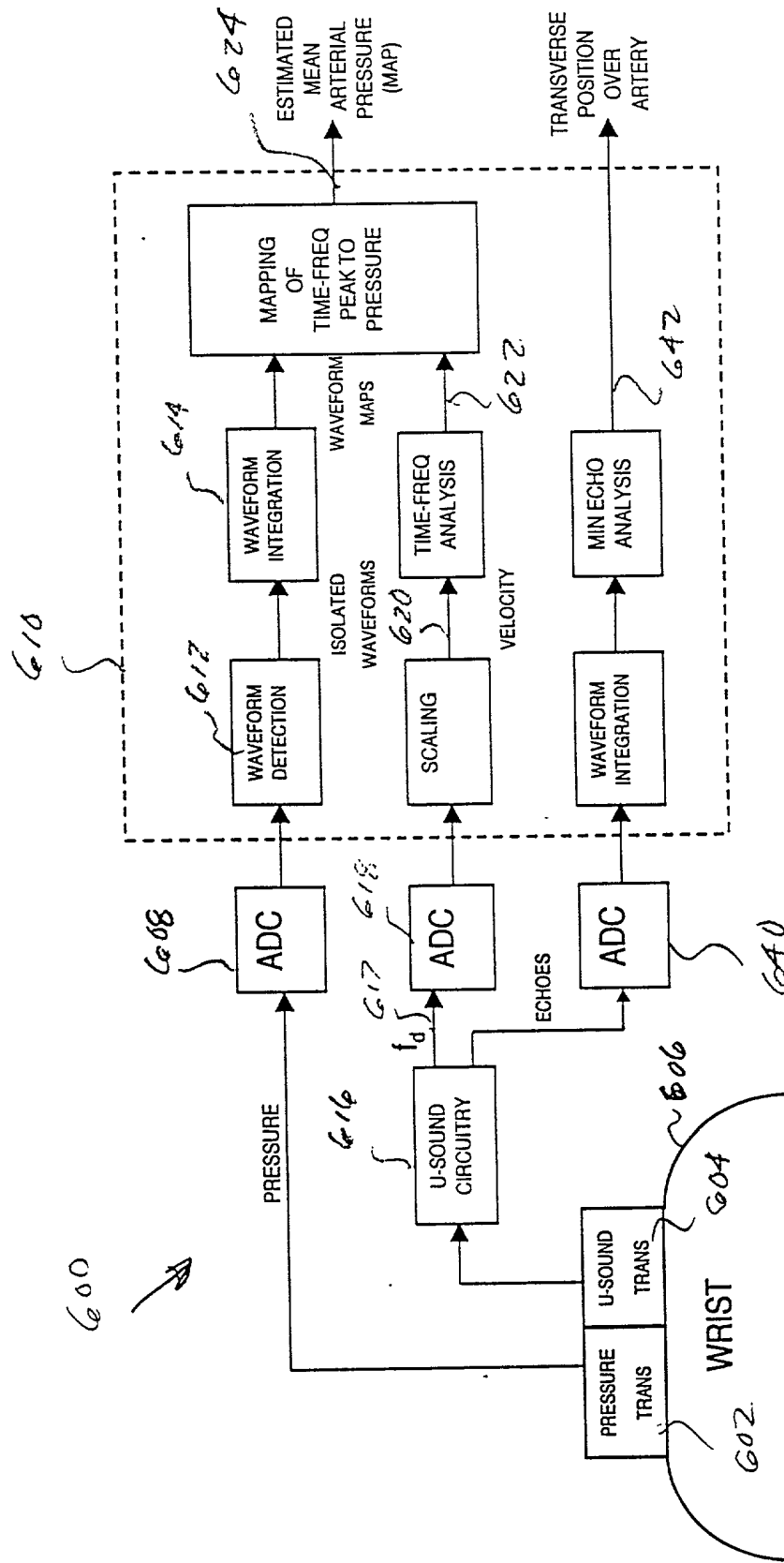


FIG. 6

Variable	Mean	SD	Min	Max
Age	35.5	10.5	20	65
Gender	Male	Female		
Marital Status	Married	Single		
Education	High School	College		
Occupation	Manager	Worker		
Income	\$10,000	\$20,000		
Health	Good	Poor		
Smoking	Yes	No		
Alcohol	Yes	No		
Exercise	Yes	No		
Stress	High	Low		
Depression	Yes	No		
Loneliness	Yes	No		
Life Satisfaction	High	Low		
Quality of Life	High	Low		
Healthcare Use	Yes	No		
Medication	Yes	No		
Compliance	Yes	No		
Adherence	Yes	No		
Engagement	Yes	No		
Participation	Yes	No		
Collaboration	Yes	No		
Communication	Yes	No		
Relationship	Good	Poor		
Trust	Yes	No		
Respect	Yes	No		
Empathy	Yes	No		
Understanding	Yes	No		
Acceptance	Yes	No		
Support	Yes	No		
Help	Yes	No		
Assistance	Yes	No		
Guidance	Yes	No		
Advice	Yes	No		
Information	Yes	No		
Knowledge	Yes	No		
Skills	Yes	No		
Abilities	Yes	No		
Talents	Yes	No		
Gifts	Yes	No		
Strengths	Yes	No		
Weaknesses	Yes	No		
Limitations	Yes	No		
Challenges	Yes	No		
Obstacles	Yes	No		
Barriers	Yes	No		
Problems	Yes	No		
Issues	Yes	No		
Concerns	Yes	No		
Worries	Yes	No		
Fears	Yes	No		
Phobias	Yes	No		
Anxieties	Yes	No		
Stressors	Yes	No		
Triggers	Yes	No		
Factors	Yes	No		
Elements	Yes	No		
Components	Yes	No		
Parts	Yes	No		
Sections	Yes	No		
Divisions	Yes	No		
Segments	Yes	No		
Units	Yes	No		
Modules	Yes	No		
Systems	Yes	No		
Frameworks	Yes	No		
Structures	Yes	No		
Models	Yes	No		
Theories	Yes	No		
Hypotheses	Yes	No		
Propositions	Yes	No		
Assumptions	Yes	No		
Beliefs	Yes	No		
Opinions	Yes	No		
Views	Yes	No		
Standpoints	Yes	No		
Positions	Yes	No		
Stances	Yes	No		
Attitudes	Yes	No		
Moods	Yes	No		
Emotions	Yes	No		
Feelings	Yes	No		
Sentiments	Yes	No		
Movements	Yes	No		
Actions	Yes	No		
Behaviors	Yes	No		
Conduct	Yes	No		
Performance	Yes	No		
Productivity	Yes	No		
Efficiency	Yes	No		
Effectiveness	Yes	No		
Success	Yes	No		
Progress	Yes	No		
Development	Yes	No		
Growth	Yes	No		
Expansion	Yes	No		
Enlargement	Yes	No		
Extension	Yes	No		
Continuation	Yes	No		
Persistence	Yes	No		
Endurance	Yes	No		
Perseverance	Yes	No		
Stamina	Yes	No		
Strength	Yes	No		
Power	Yes	No		
Force	Yes	No		
Energy</				

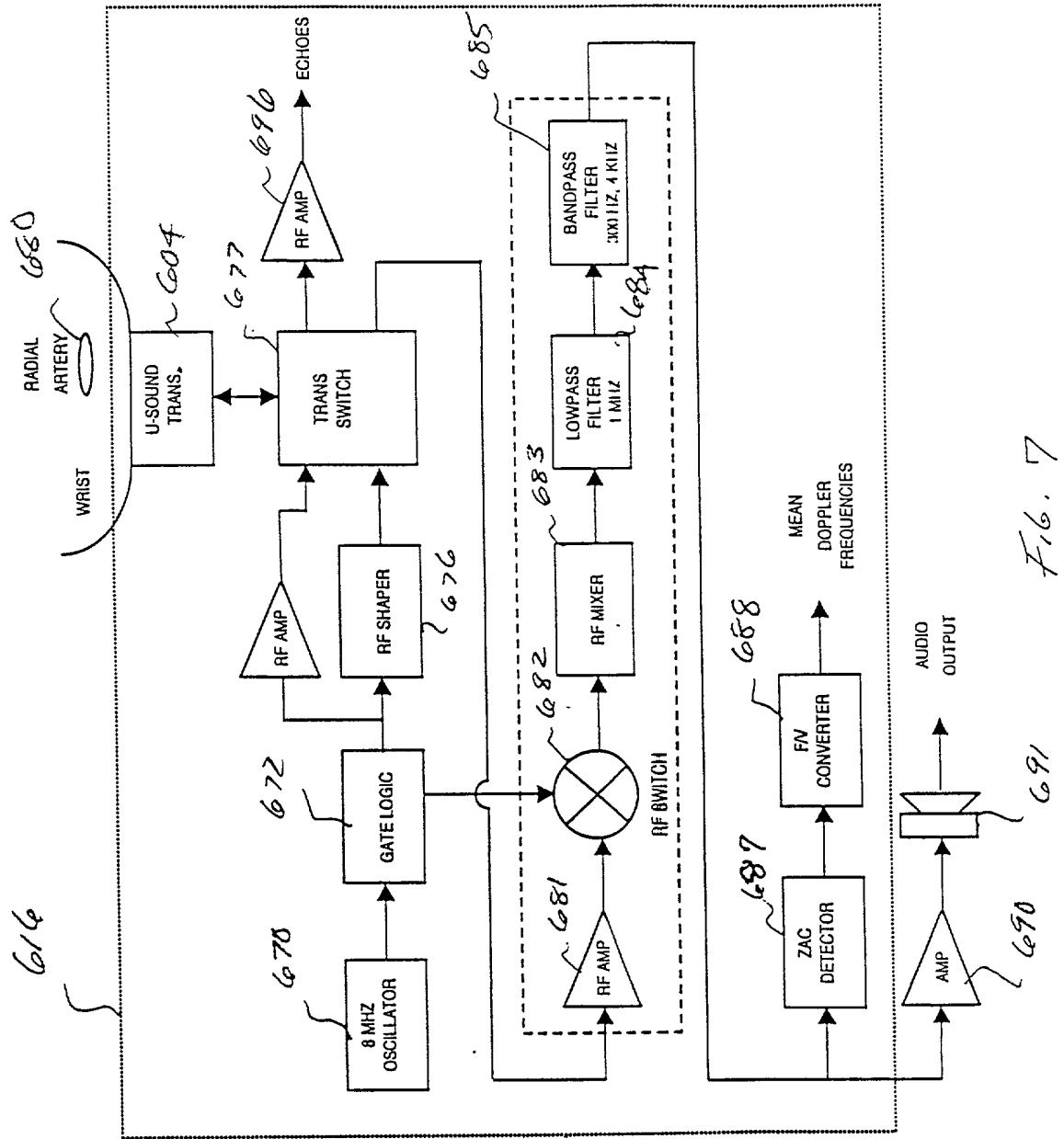
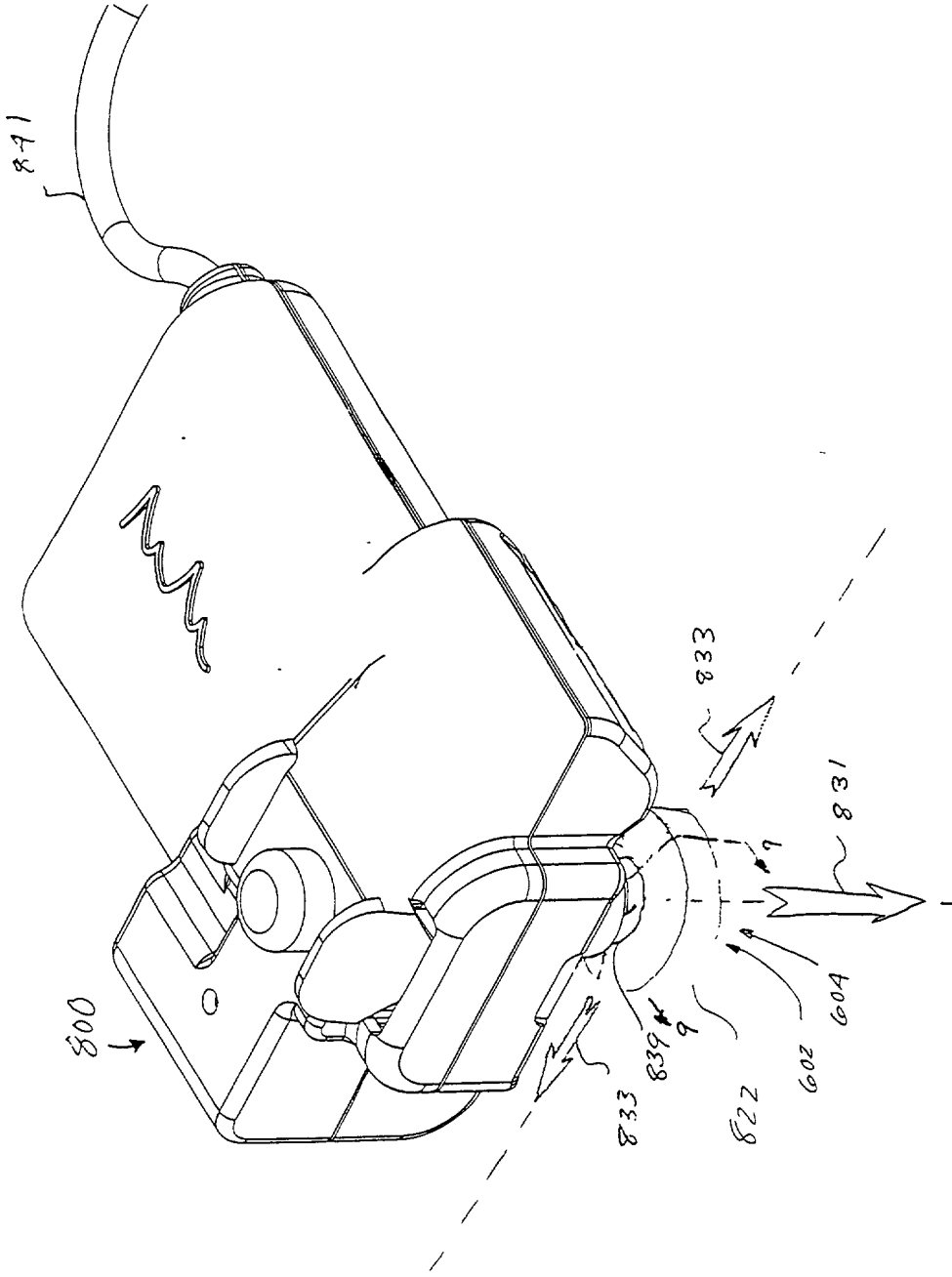


FIG. 8



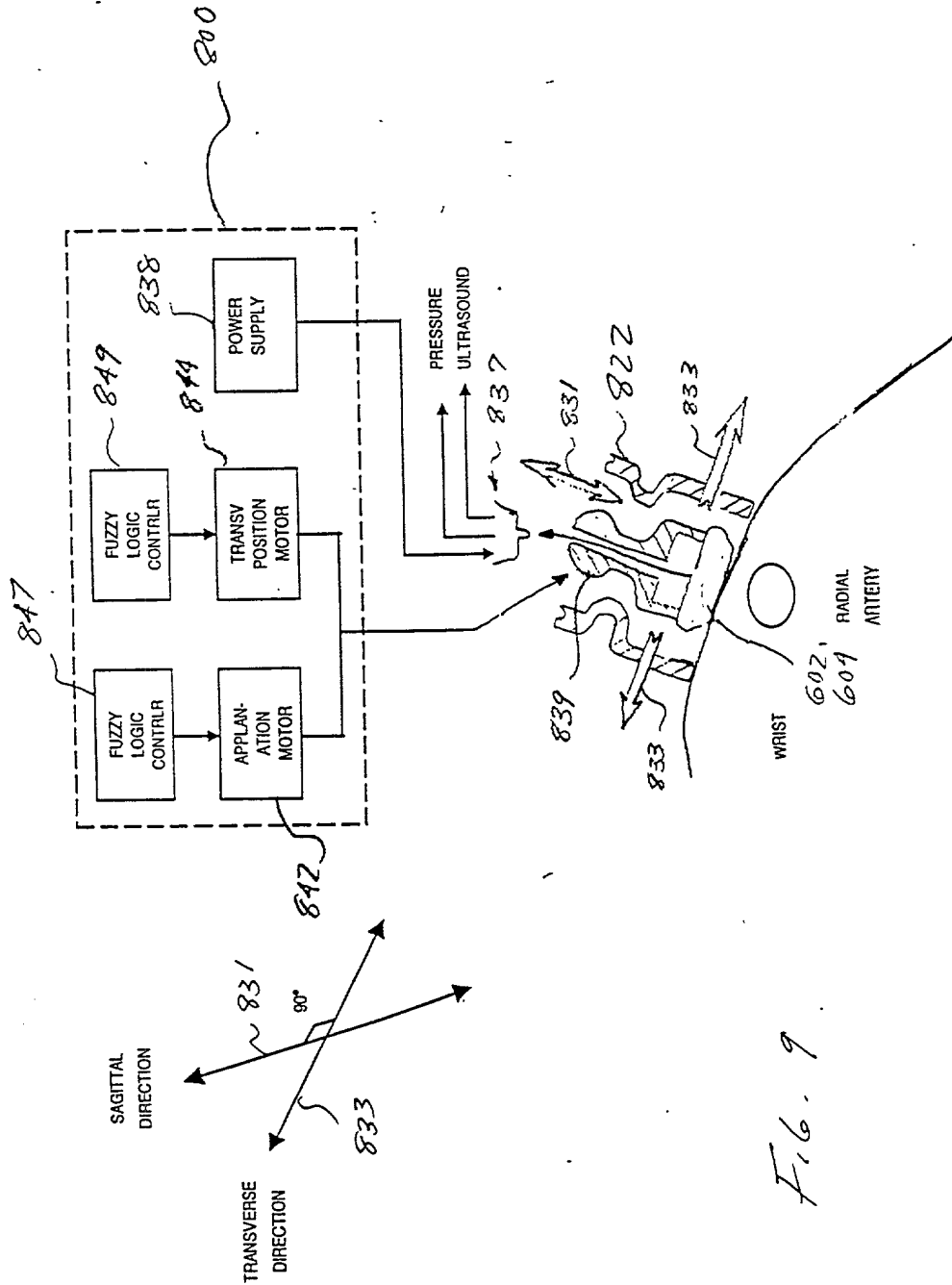
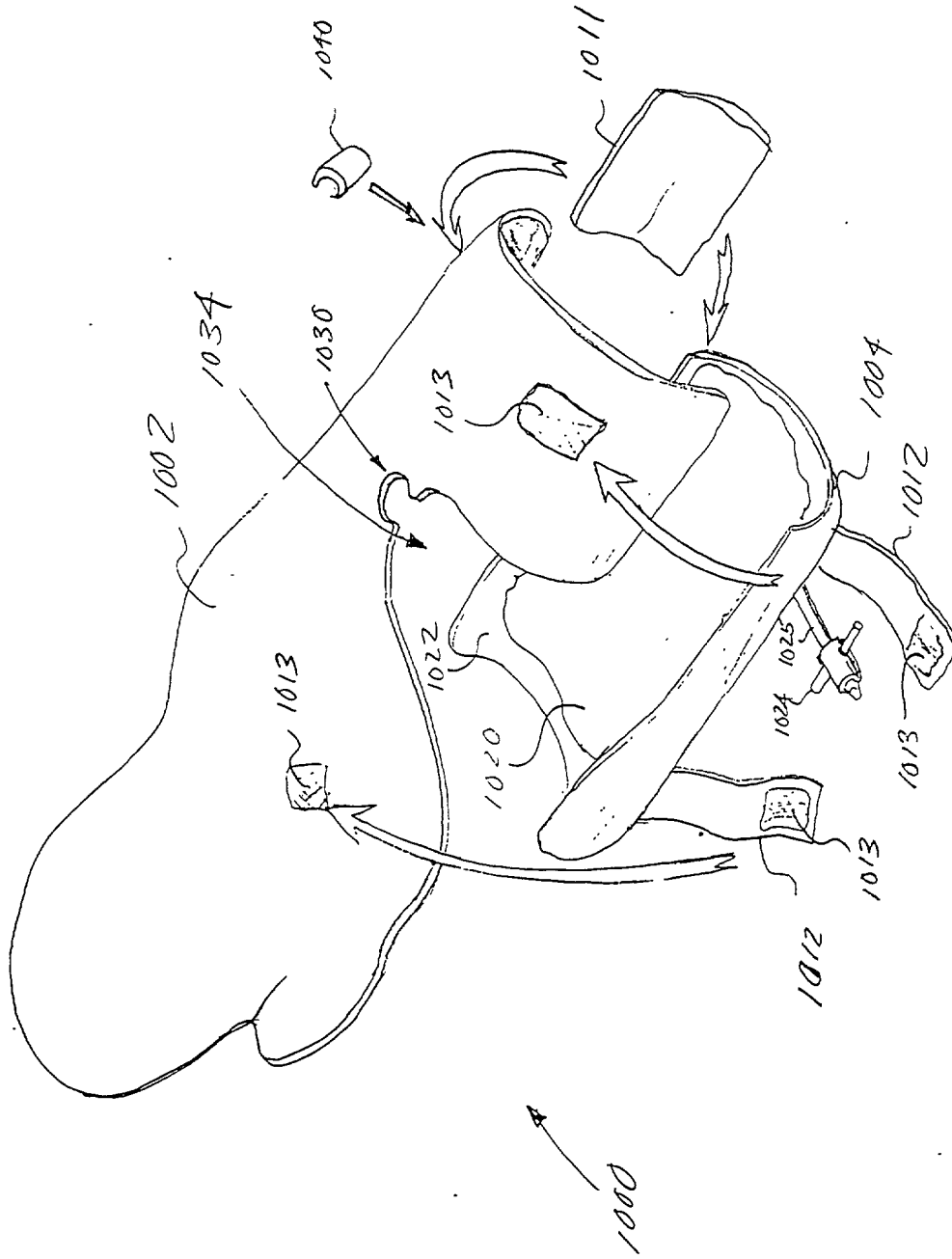


FIG. 9



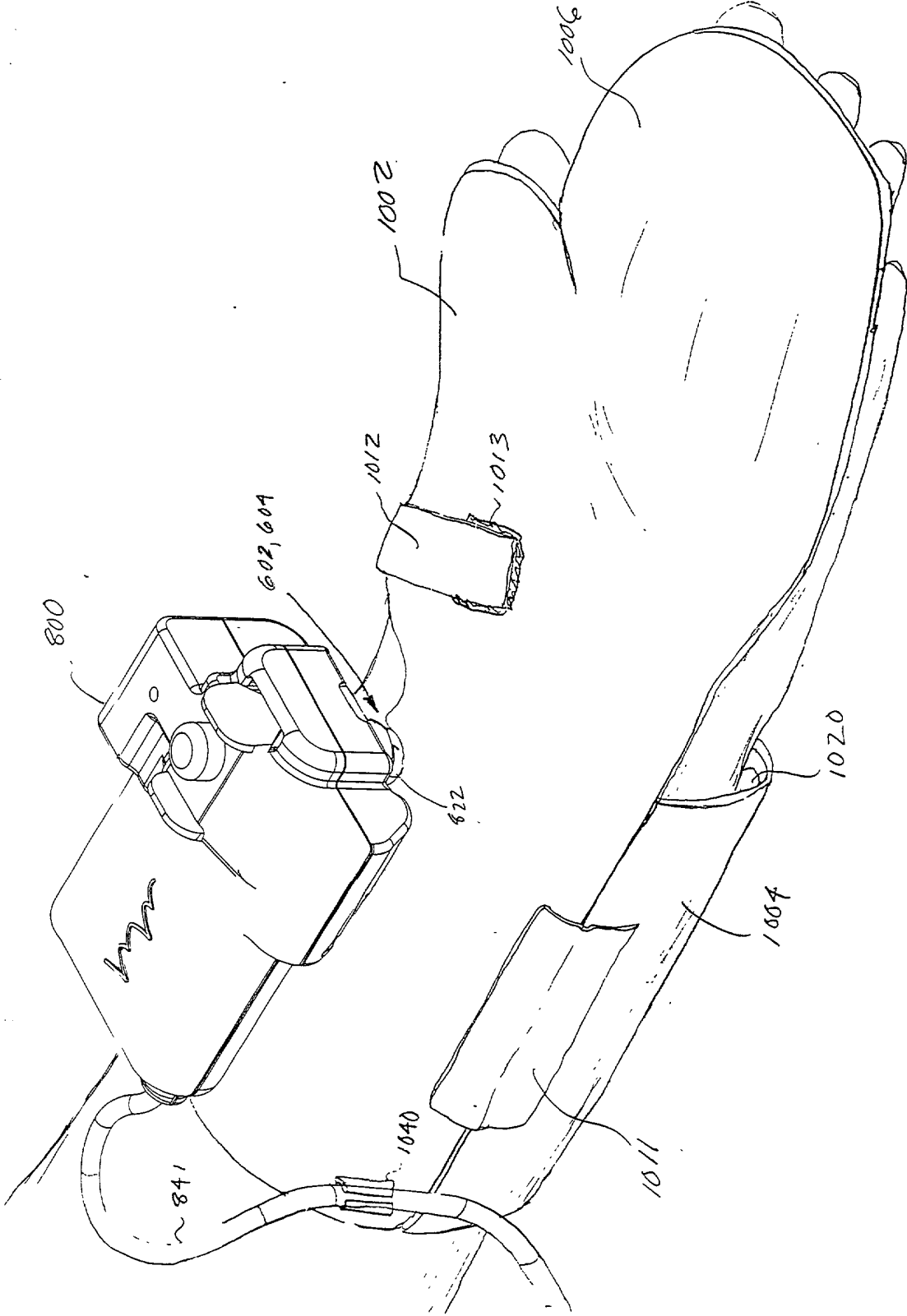
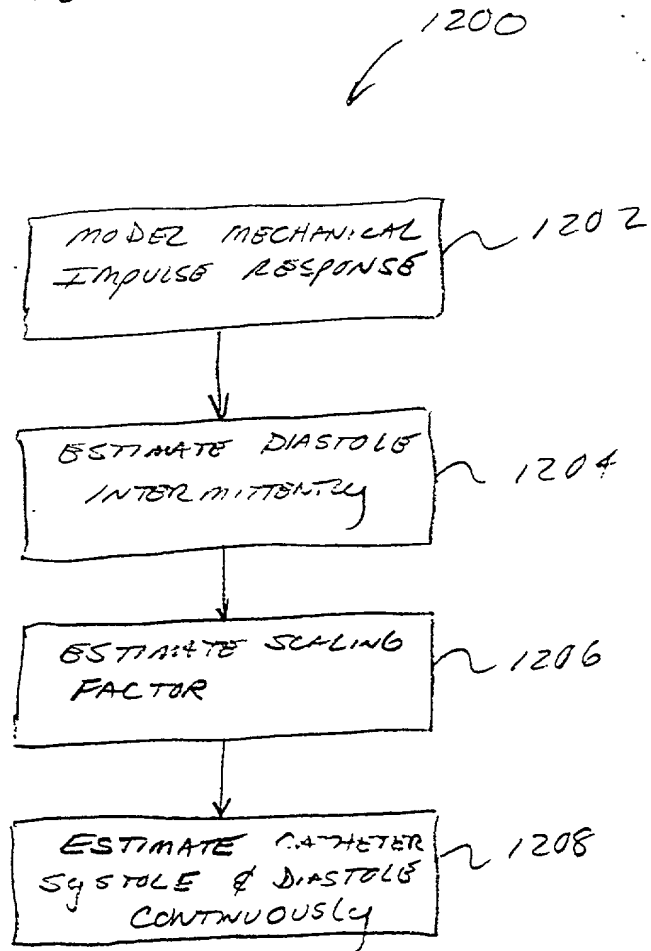


FIG. 12



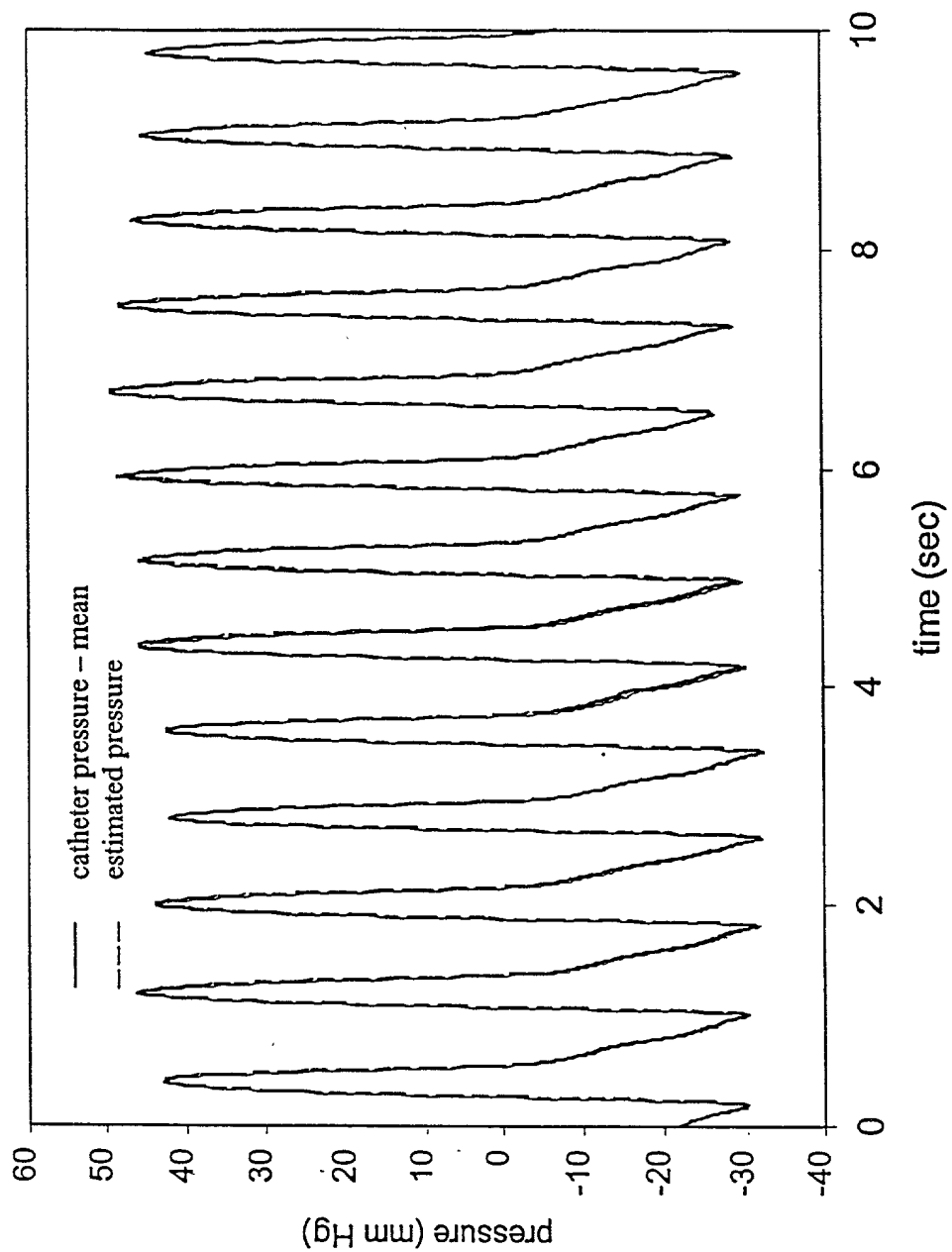


FIG. 13

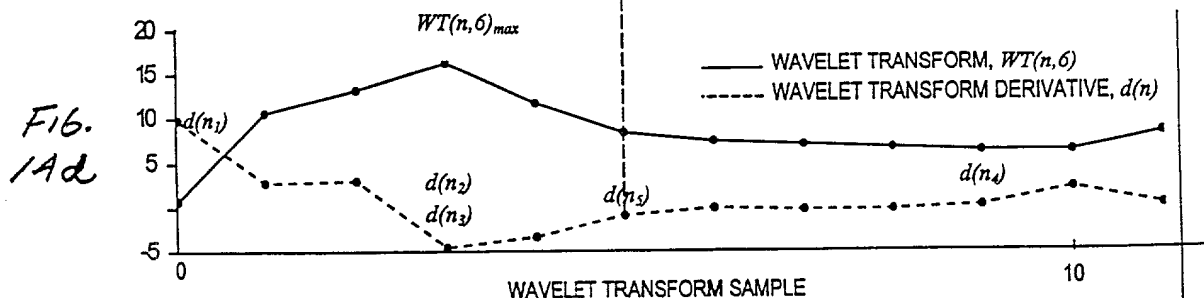
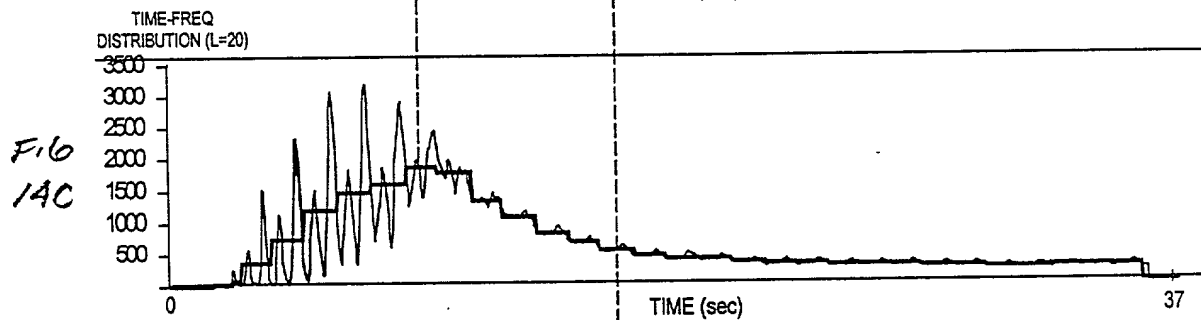
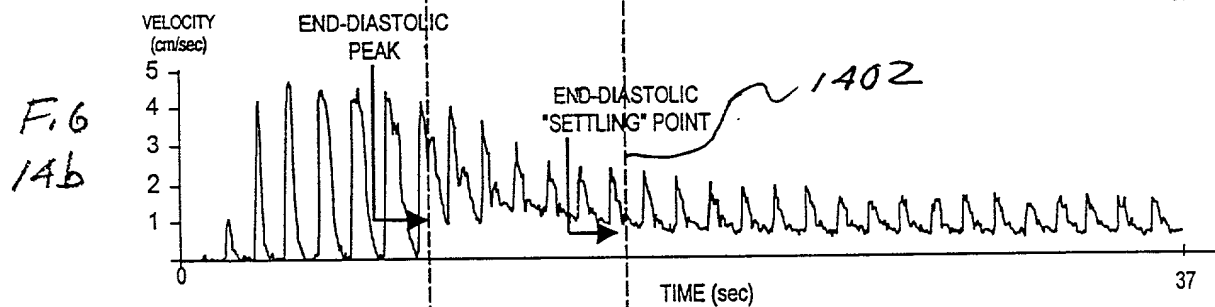
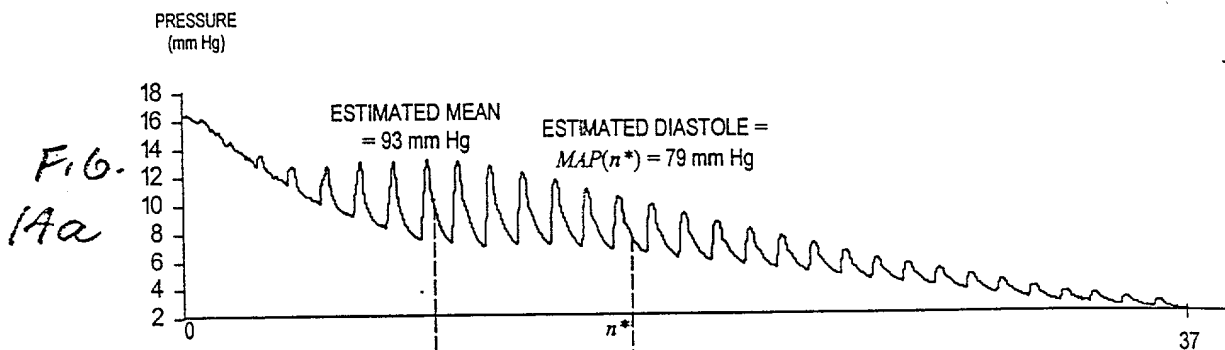


FIG. 15

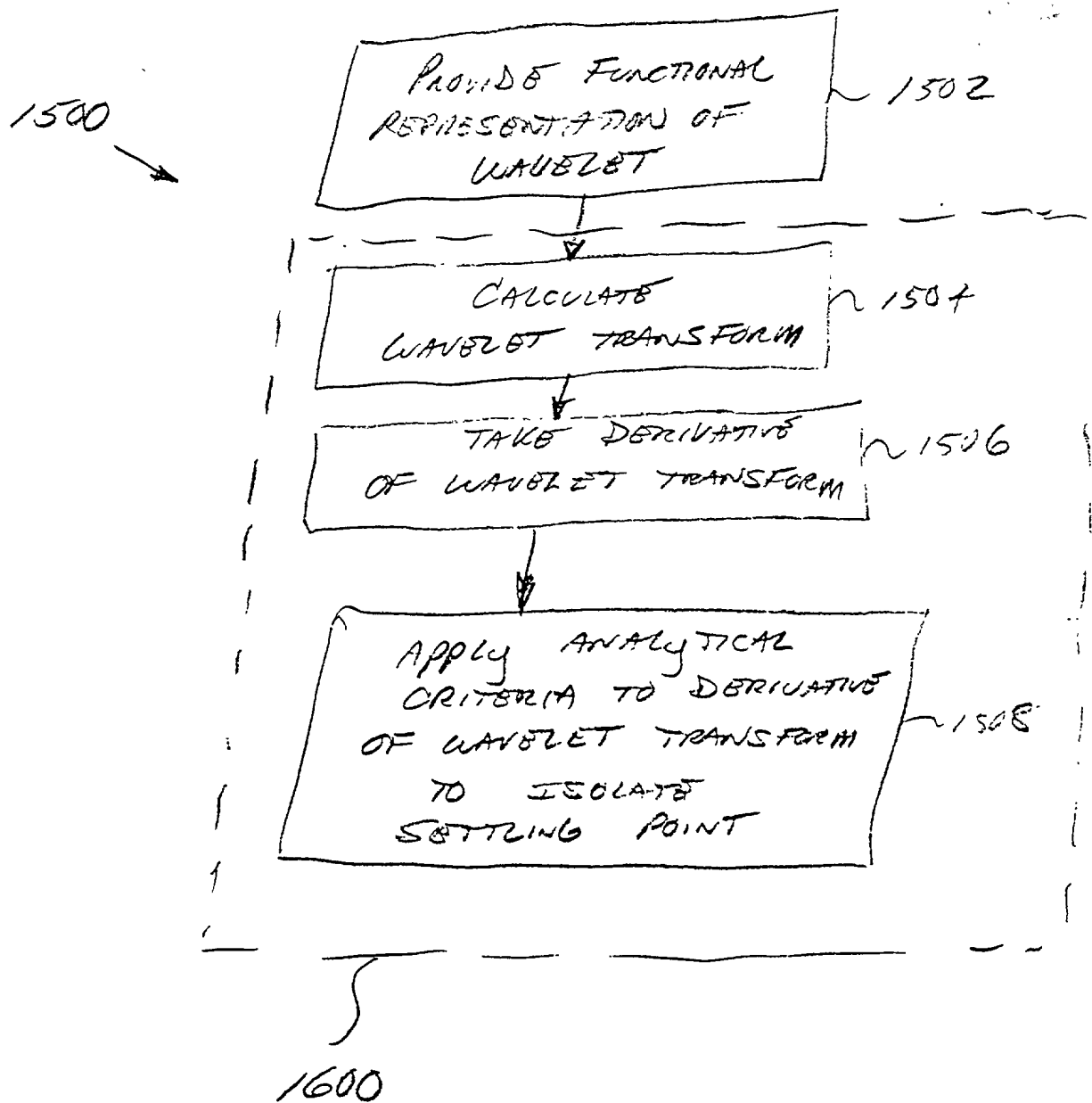
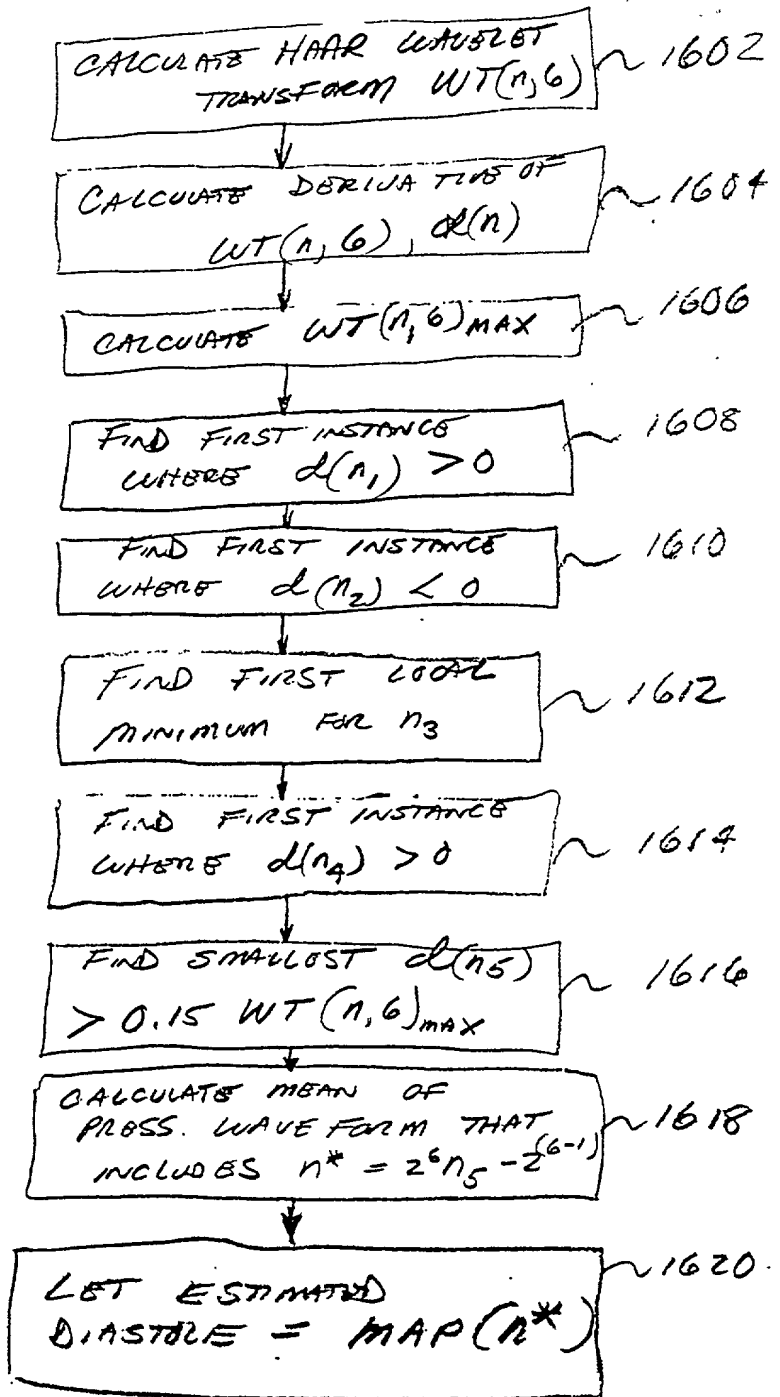


FIG. 16

1600



FOOT 60 22651360

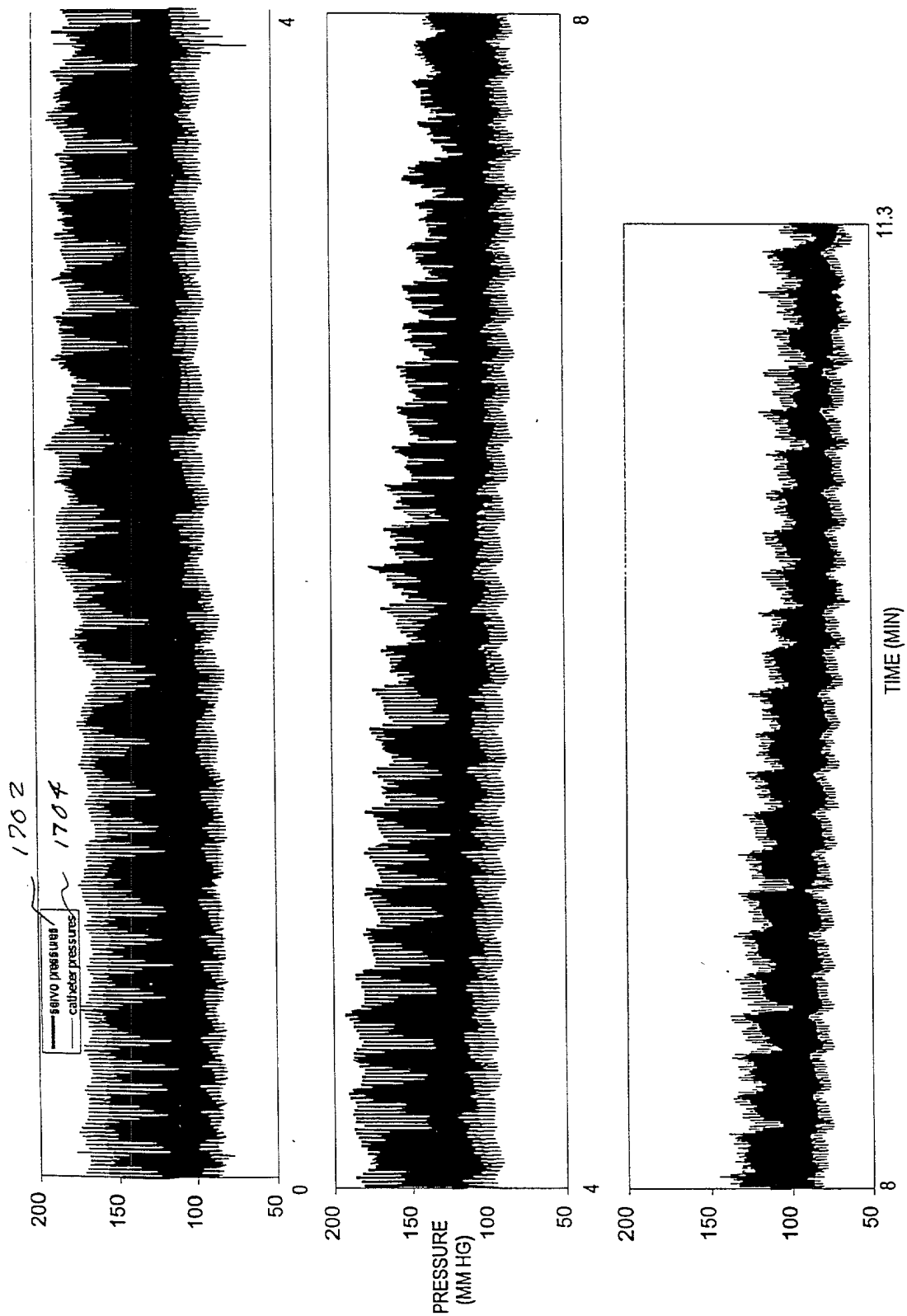
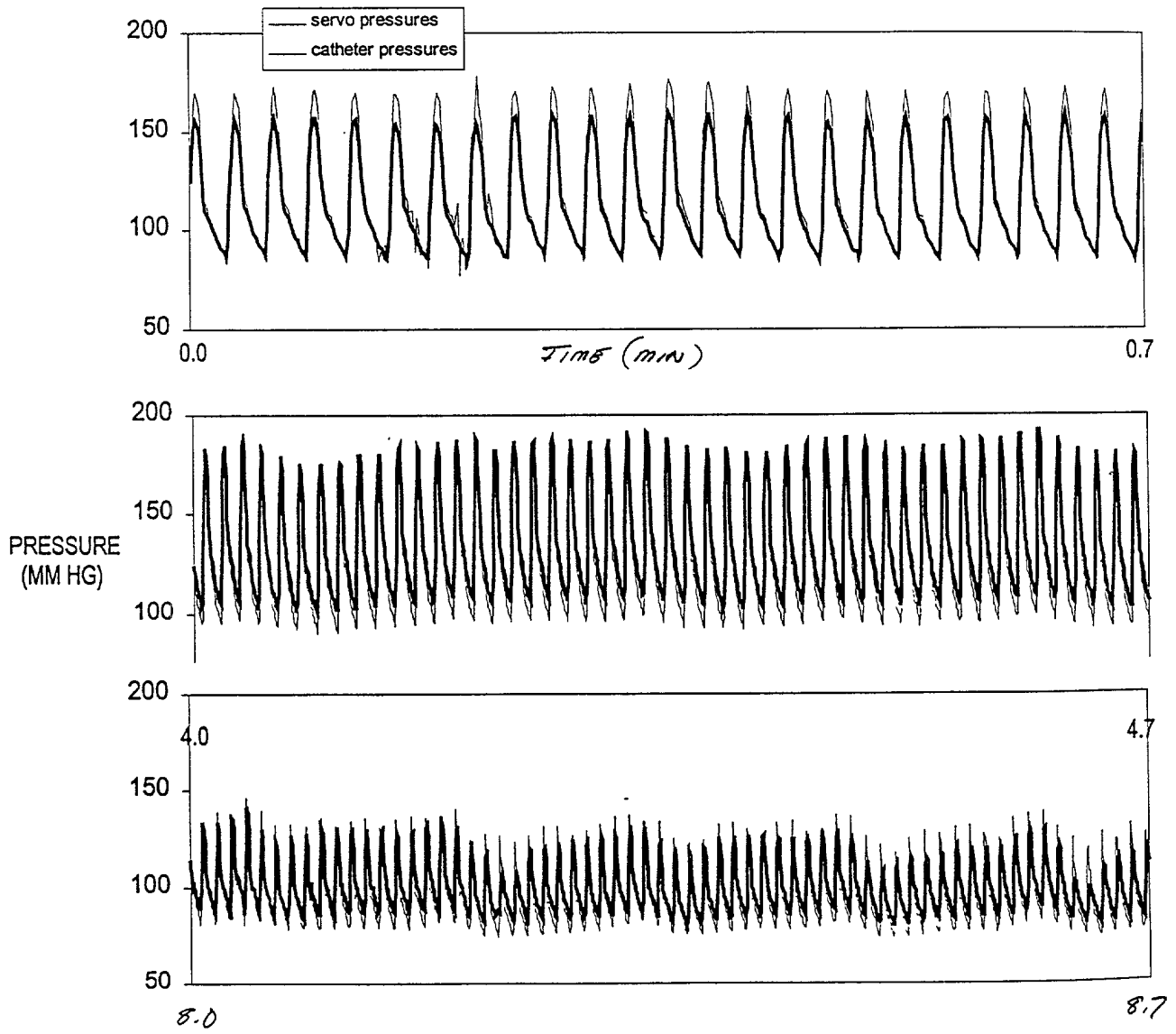


FIG. 17

FIG. 18



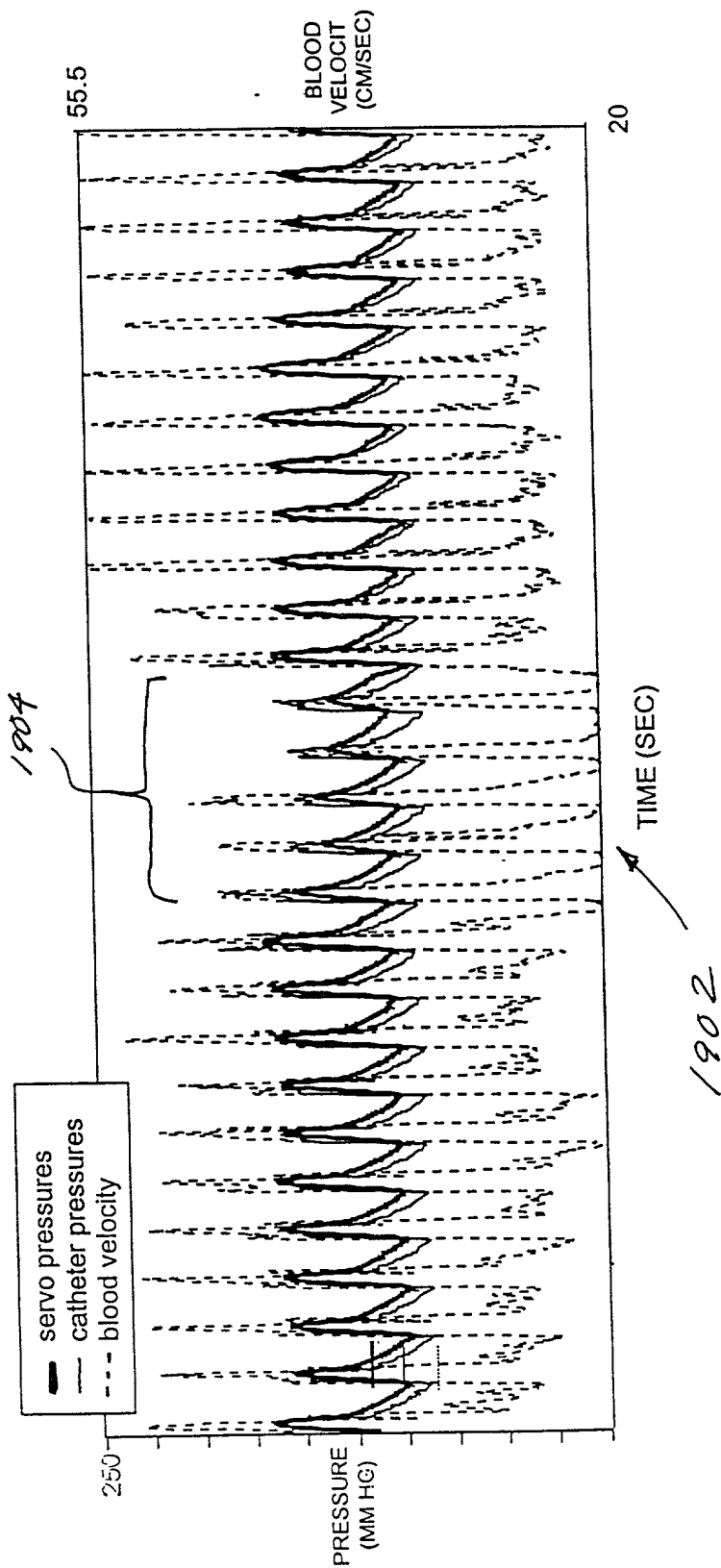


FIG. 19

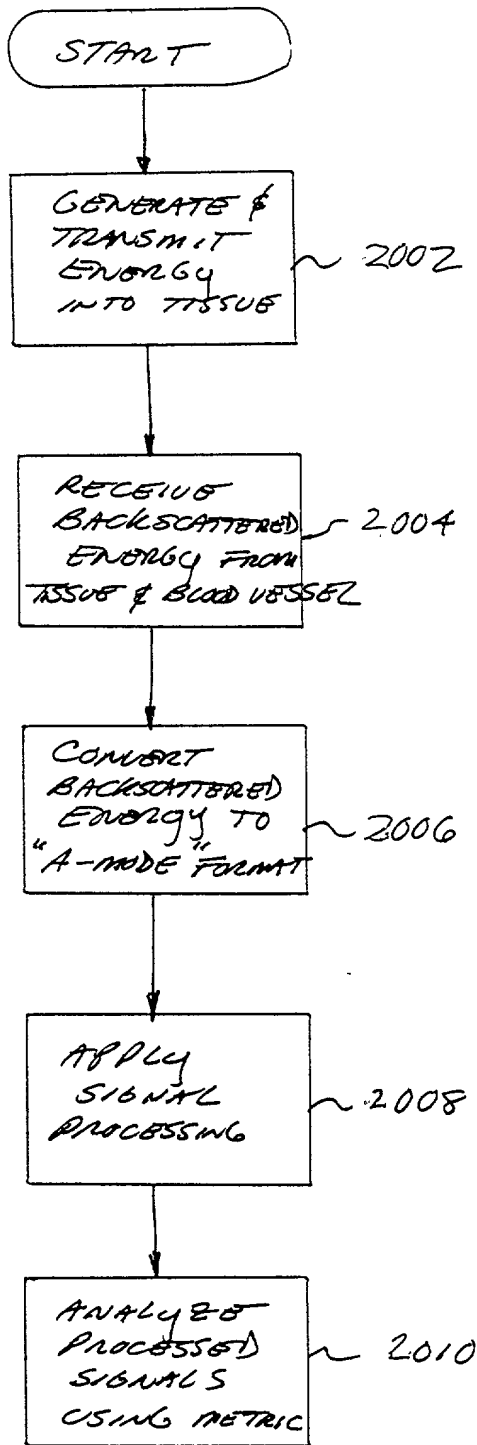
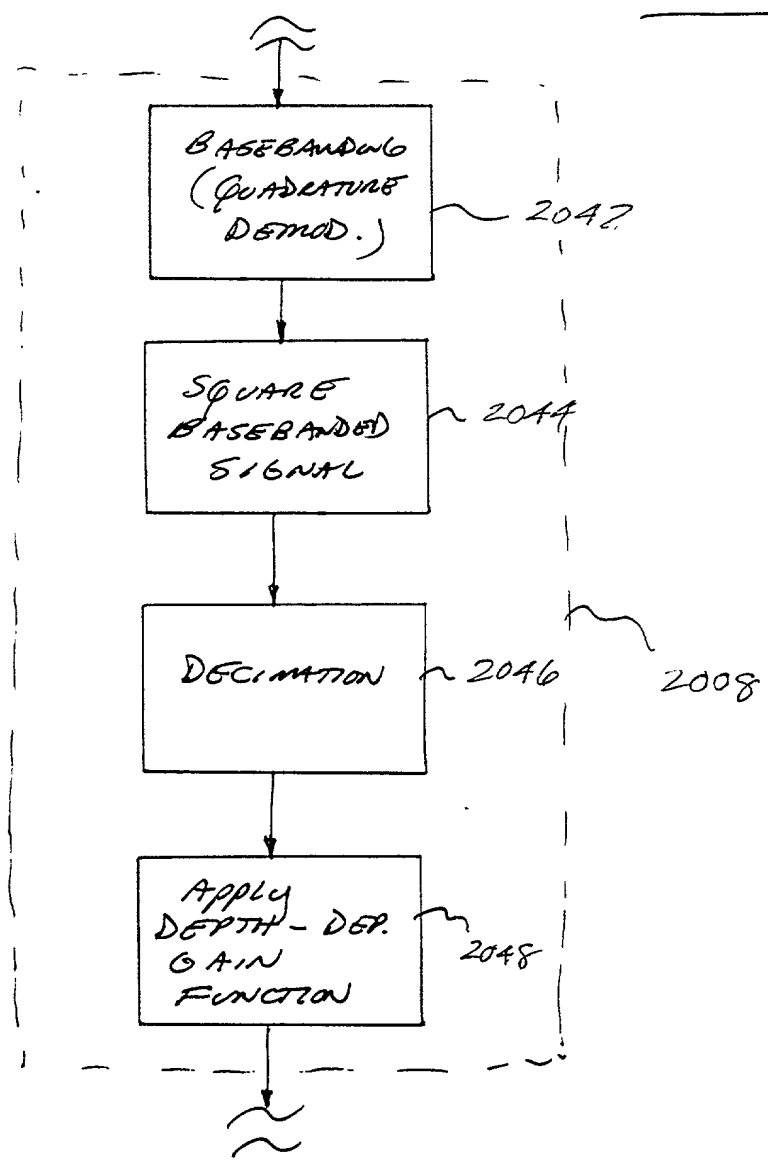


FIG. 20

2000

FIG. 20a



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graph LR; A[A-mode signal] --> QD[Quadrature Demodulate]; QD -- "complex envelope" --> MS[Magnitude Squared]; MS -- "envelope squared" --> TGC[TGC]; TGC --> AP["Average Power (1 mm interval)"]; AP --> DFM[Detect First Minimum]; DFM -- "location of blood within artery" --> AWS[Arterial Wall Search]; AWS -- "front and back arterial wall positions" --> Out[ ];
```

The diagram illustrates the processing sequence for A-mode signals. It begins with an 'A-mode signal' input, which passes through a 'Quadrature Demodulate' block. The output of this block is labeled 'complex envelope'. This signal then enters a 'Magnitude Squared' block, whose output is labeled 'envelope squared'. The signal then passes through a 'TGC' (Time Gain Control) block. The output of the TGC block is labeled 'Average Power (1 mm interval)'. This signal then passes through a 'Detect First Minimum' block. The output of this block is labeled 'location of blood within artery'. Finally, the signal enters an 'Arterial Wall Search' block, whose output is labeled 'front and back arterial wall positions'.

Fig. 21

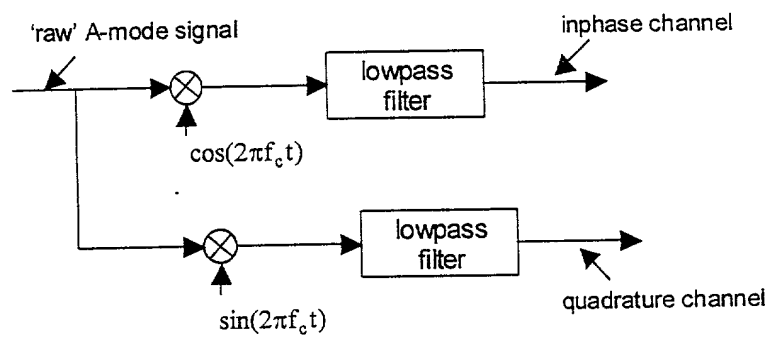


Fig. 24

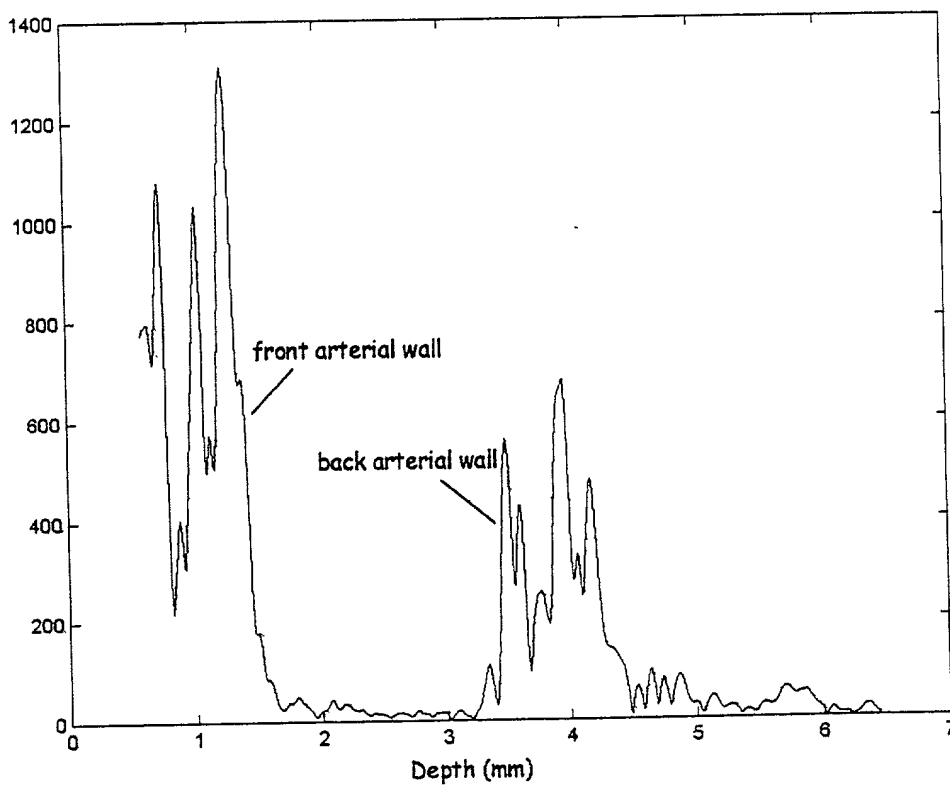


Fig. 22

2042

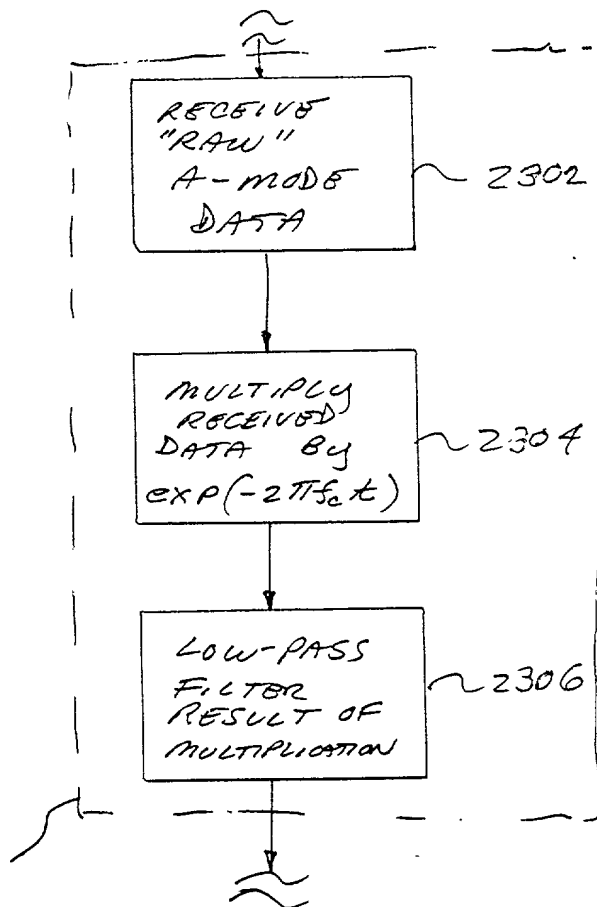


FIG. 23

FOUO 094001 035159

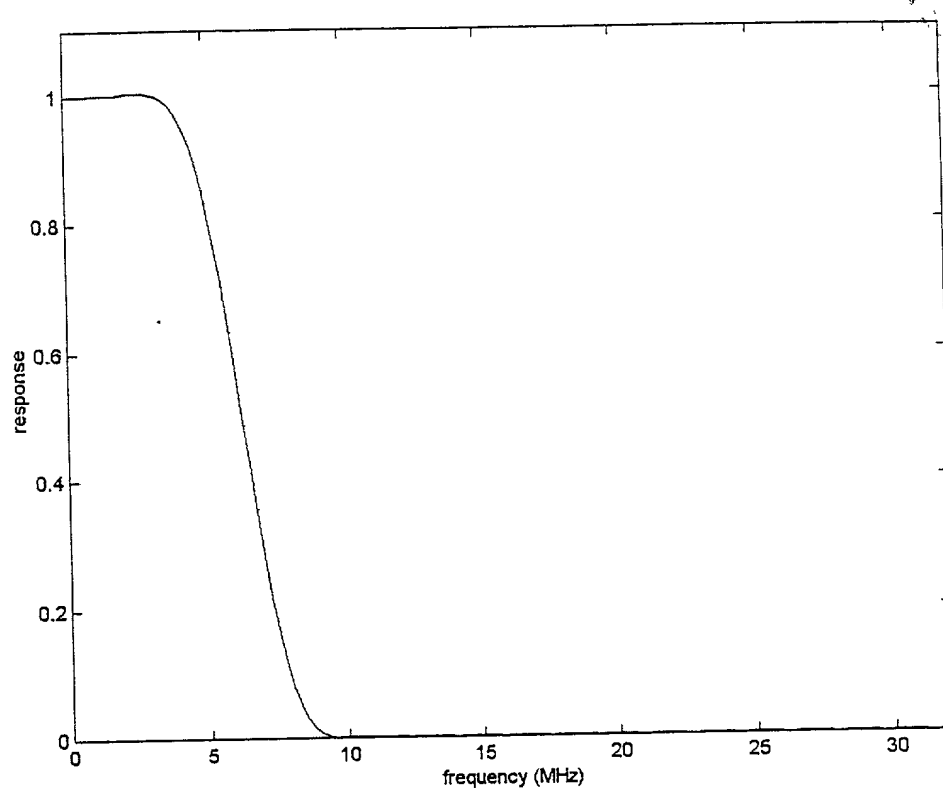


Fig. 25

FOOTING - 295T860

-1
-1
0
2
4
6
6
2
-6
-16
-25
-26
-16
10
50
98
143
176
188
176
143
98
50
10
-16
-26
-25
-16
-6
6
6
6
4
2
0
-1
-1

FIG. 26

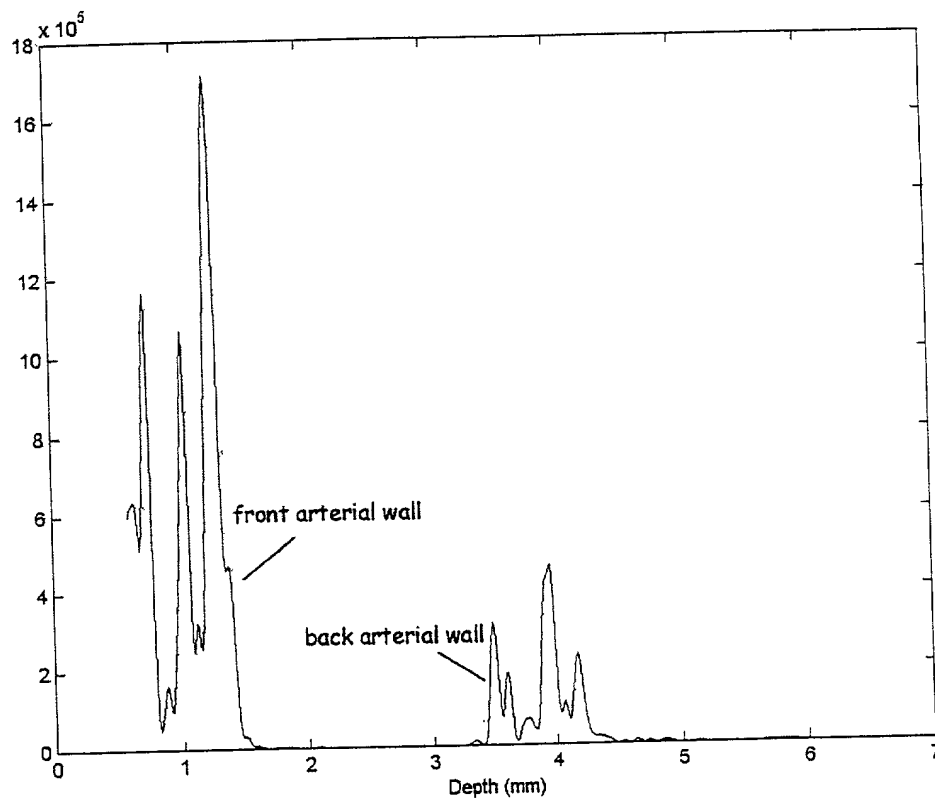


Fig. 27

0915983-091001

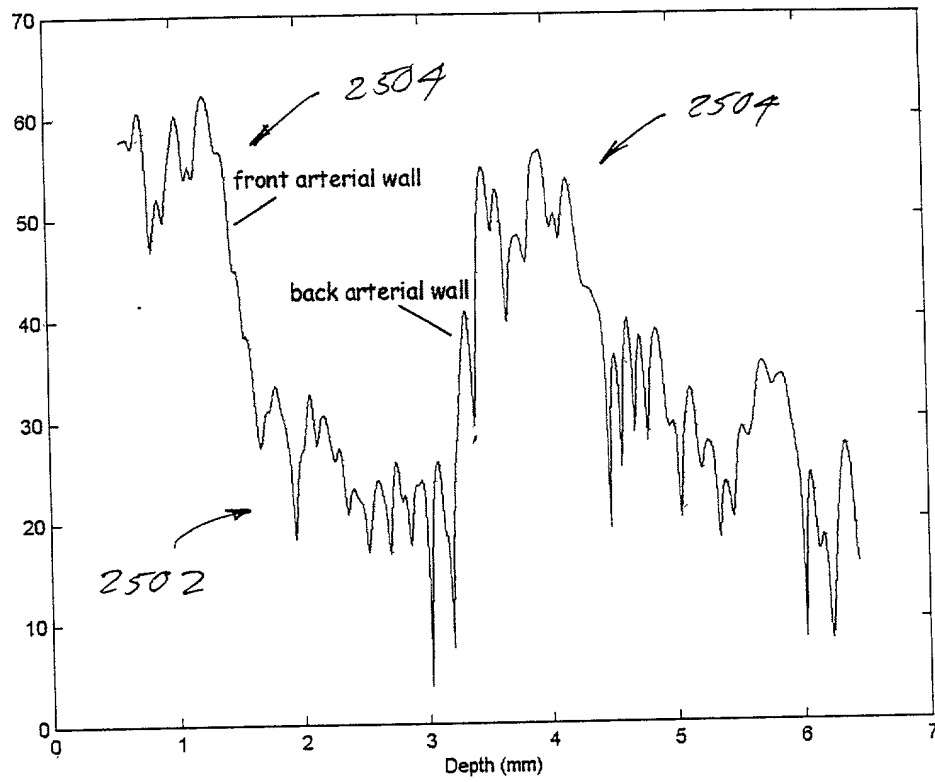


Fig. 28

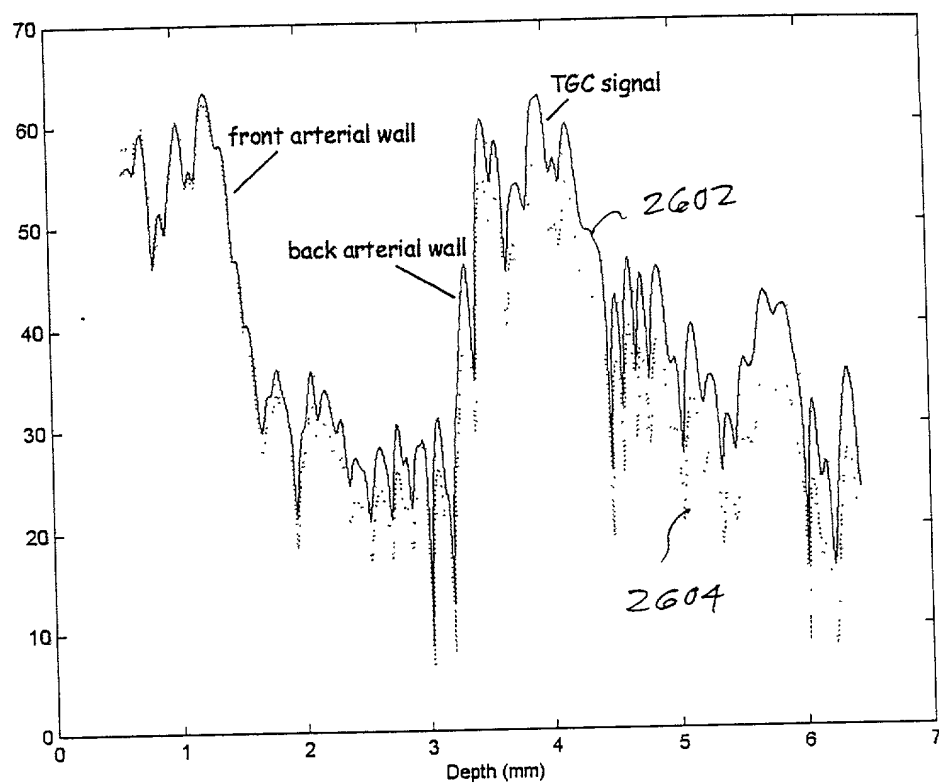


Fig. 29

09815982-091001

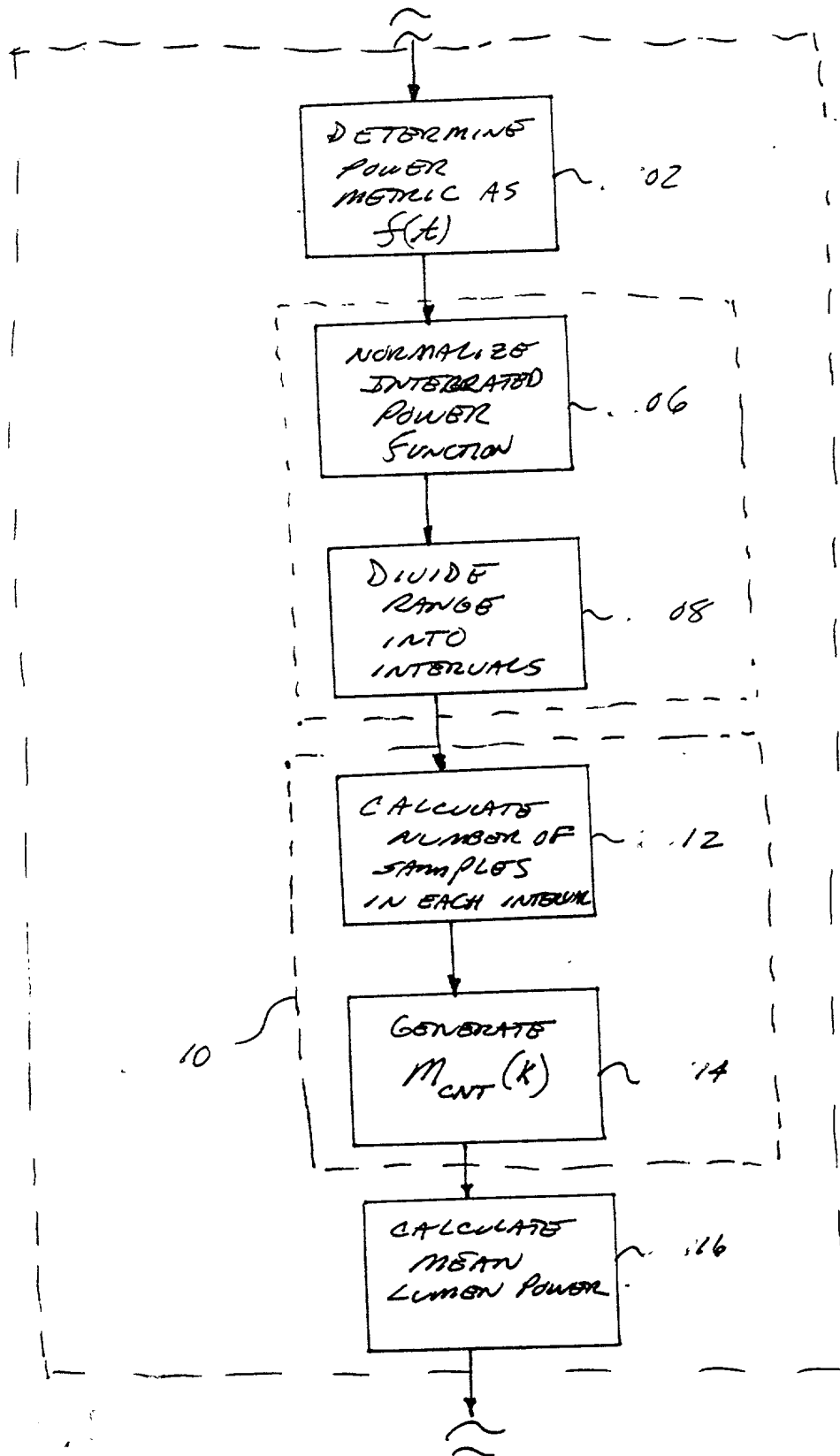


FIG. 30a

T00T60" 2865T860

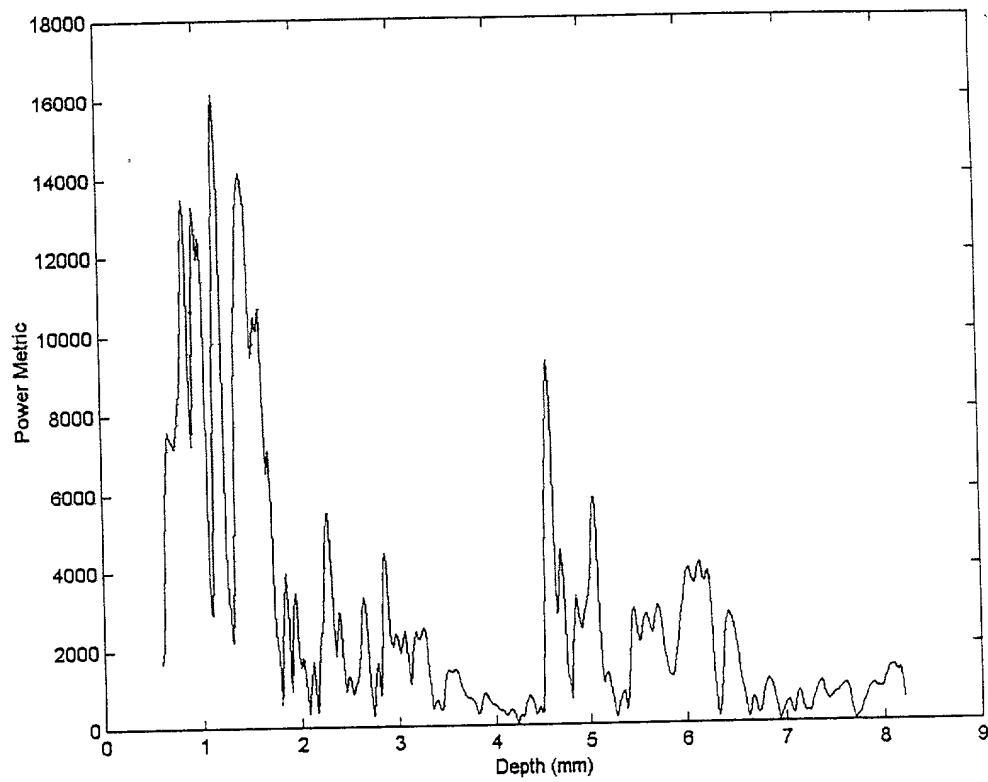


Fig.

306

09815983-091001
T00160-286T860

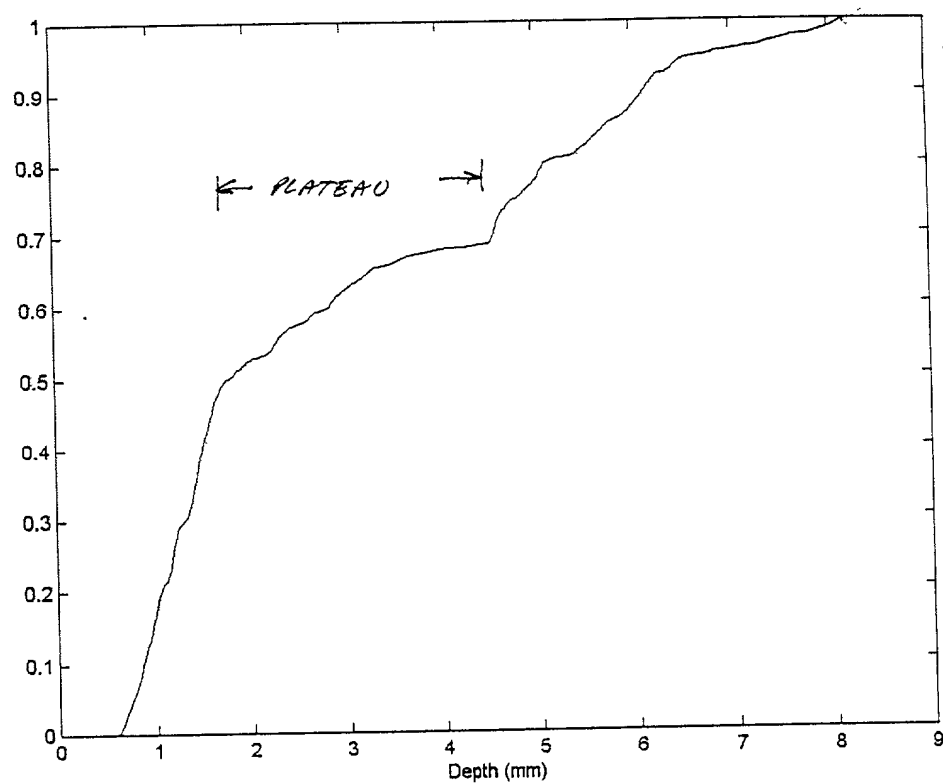


Fig. 30c

031592-091001
T00T60-286T860

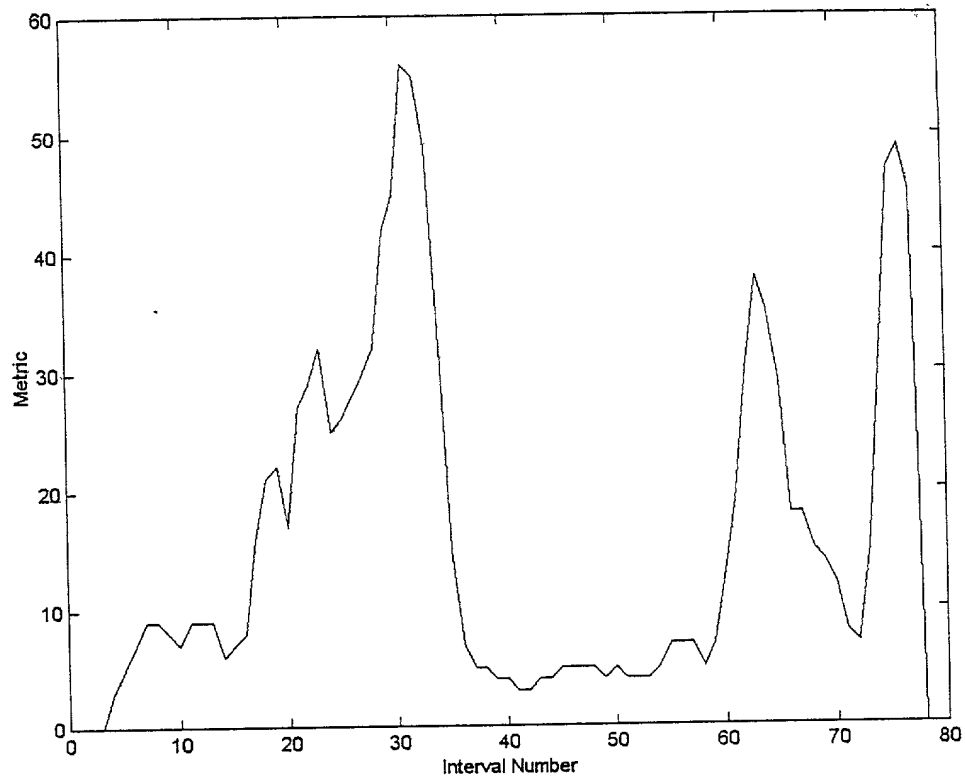


Fig. 30d

091593-091001
T00T60-2865T860

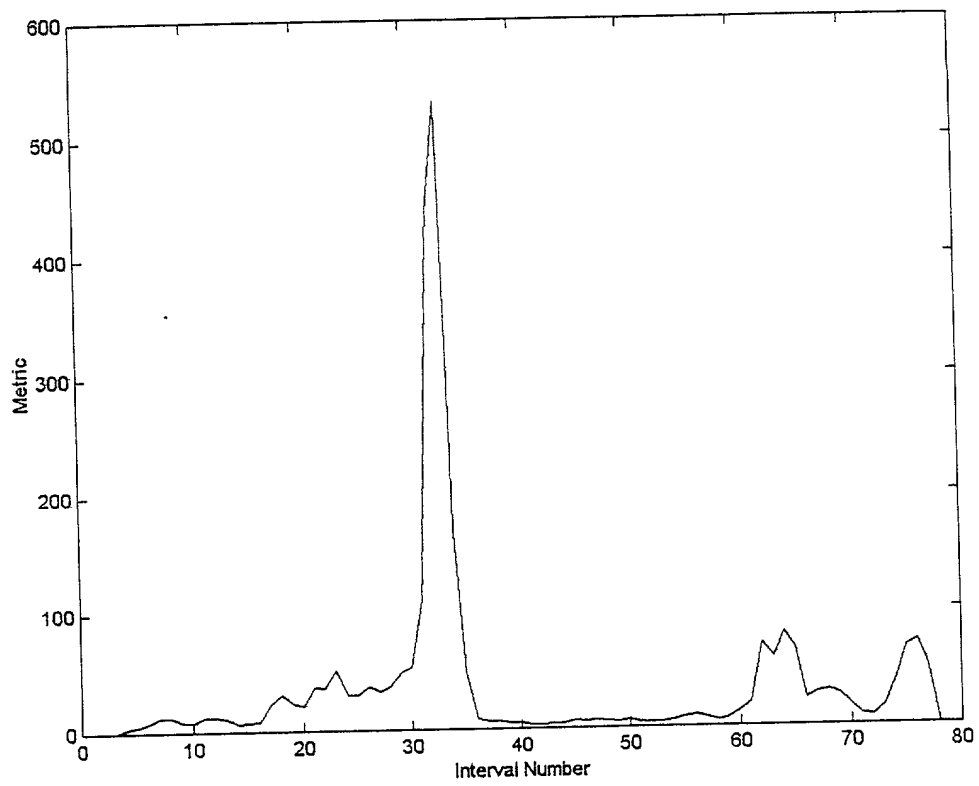


Fig. 30e

09815982-091001

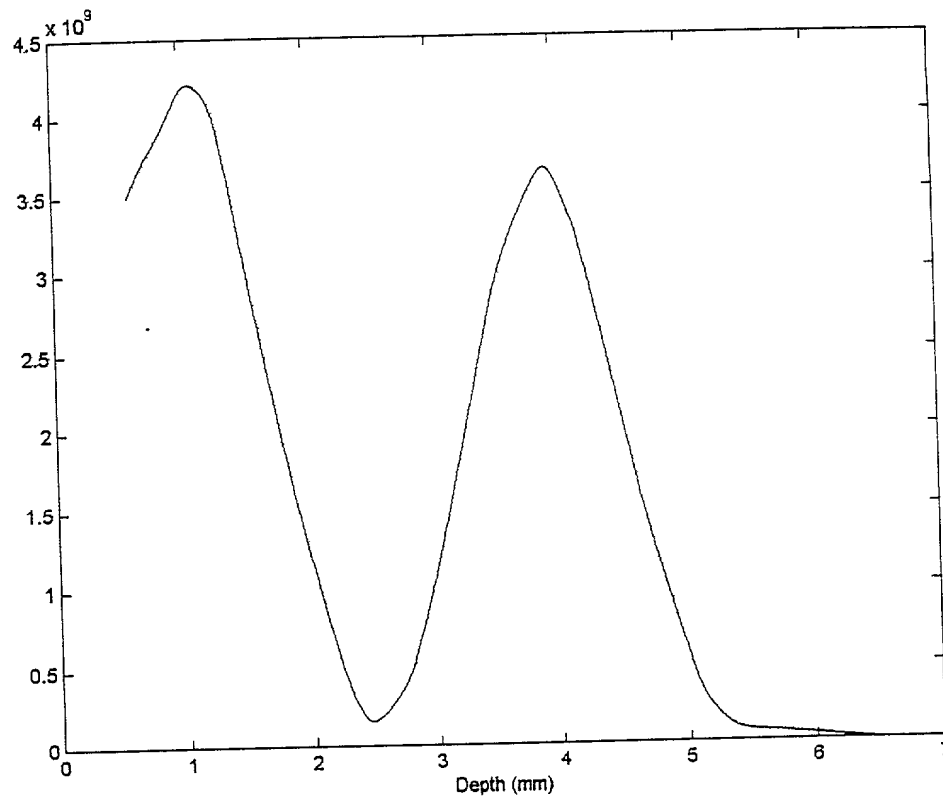


Fig.

3/a

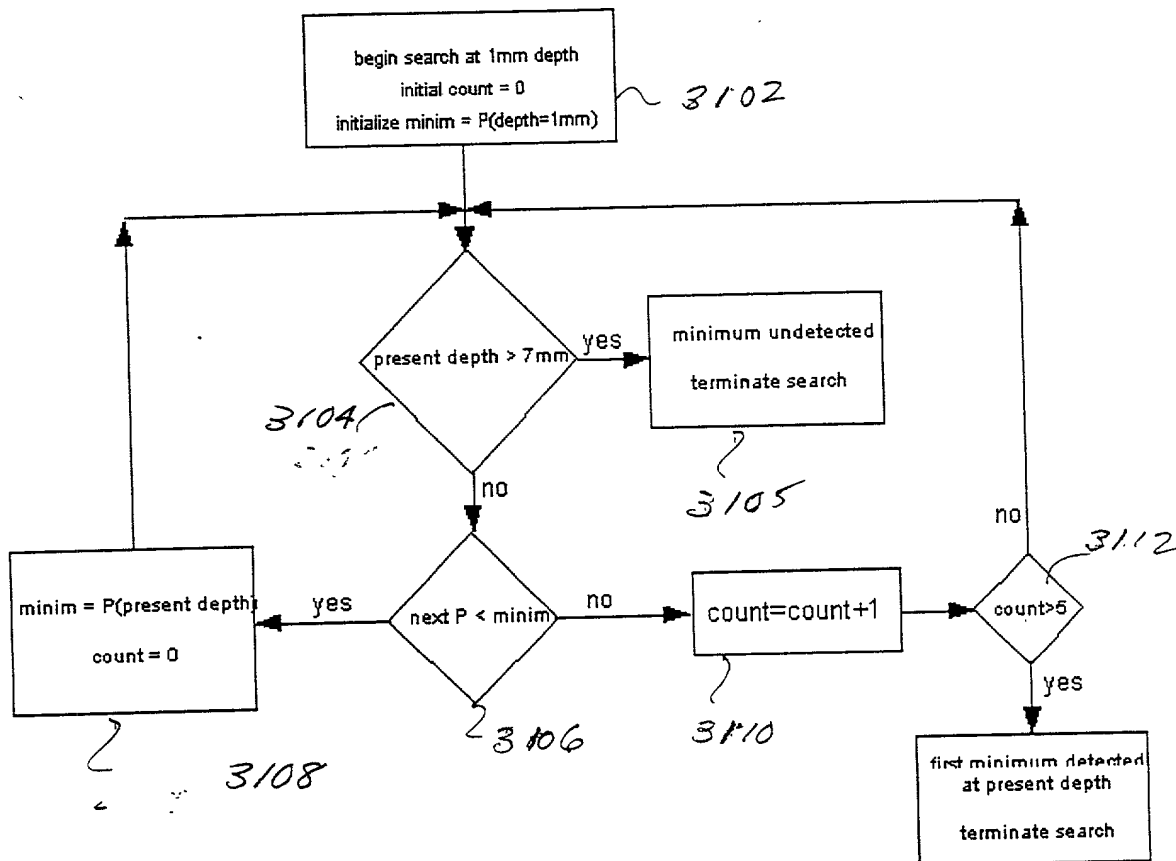


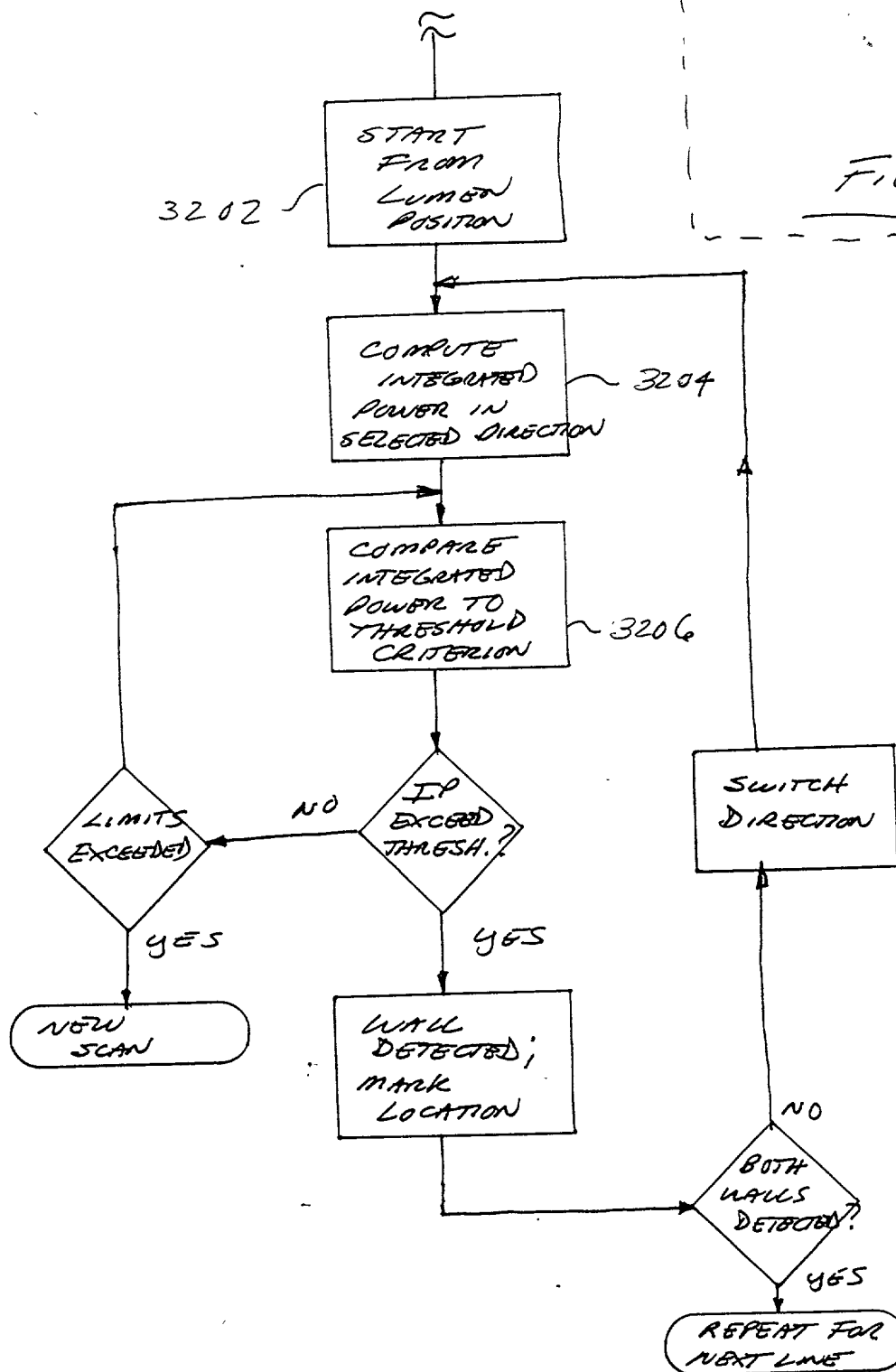
Fig.

3/6

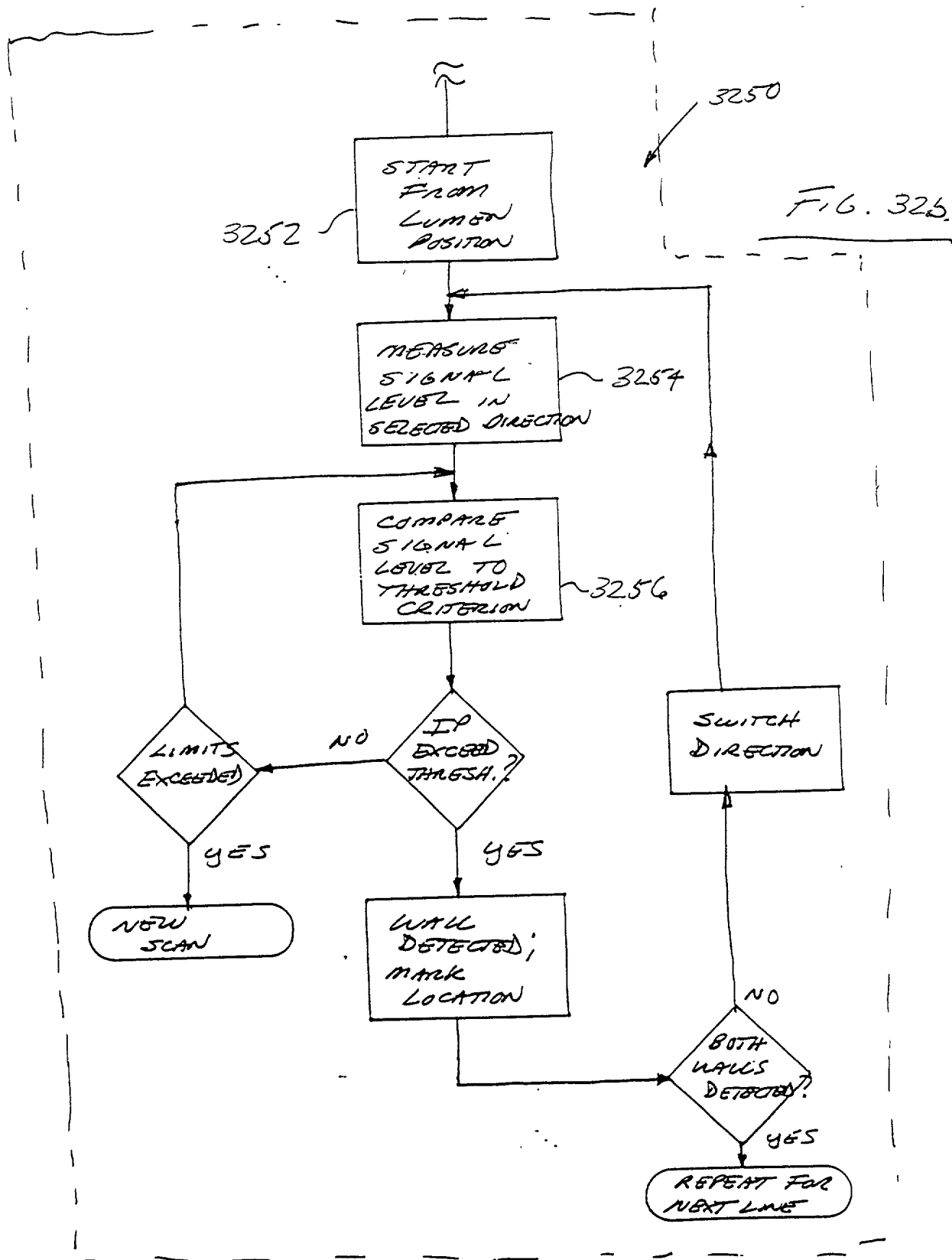
3114

3202

FIG. 322



00159862-091001



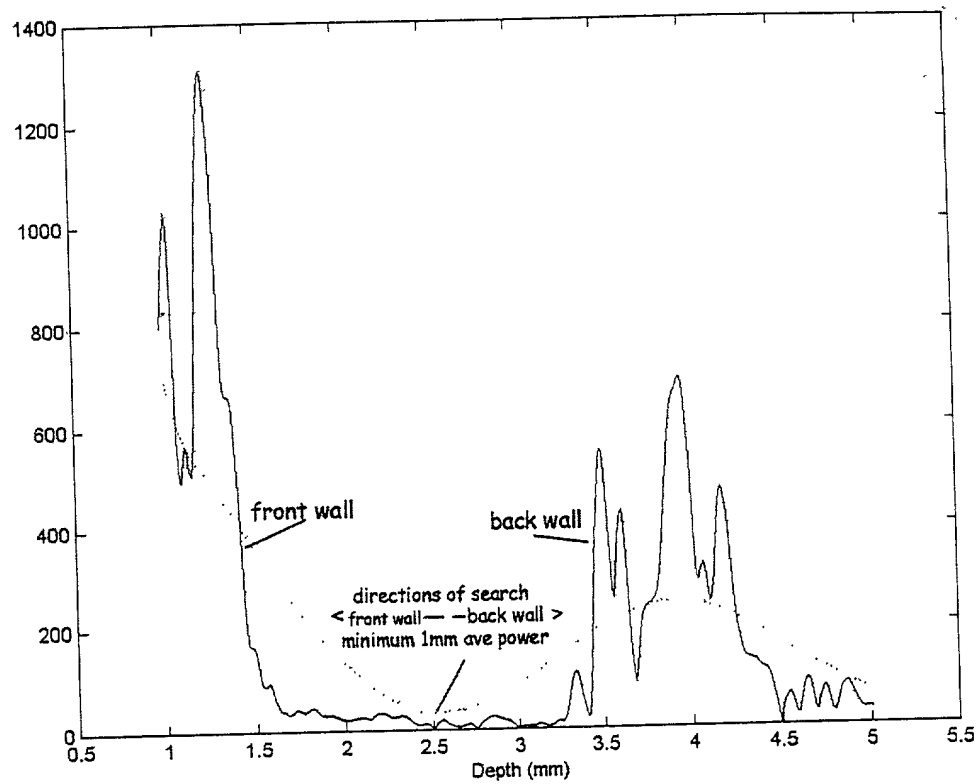


Fig. 33

100160"23651860

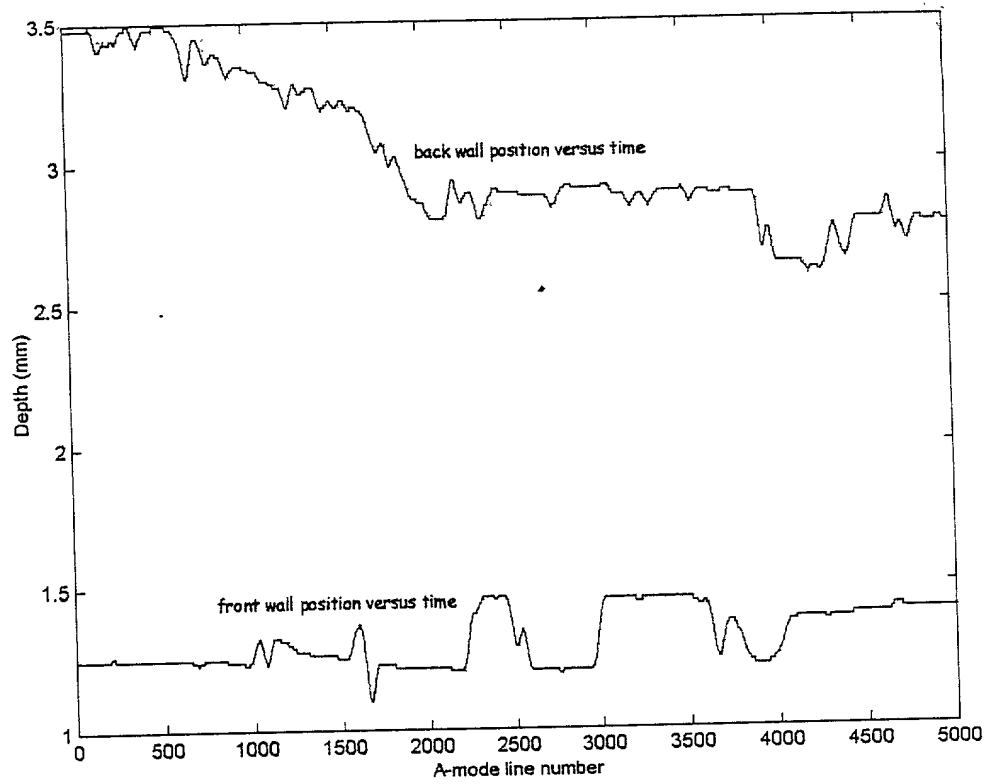


Fig. 34

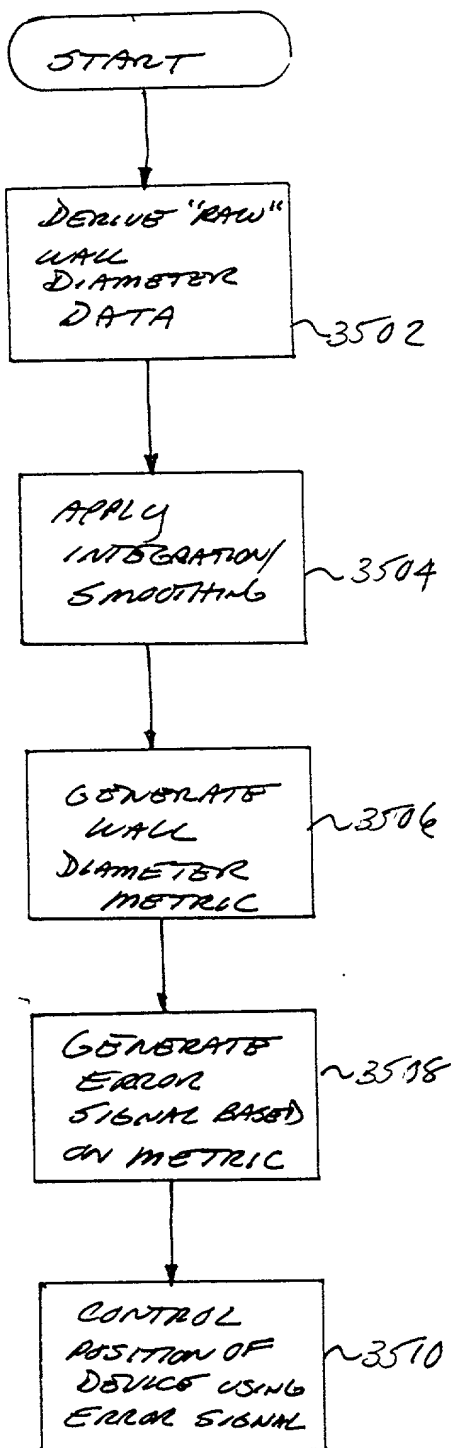


FIG. 35

3500
↓